What Works in the Provision of Higher, Further and Continuing Education, Training and Rehabilitation for Adults with Disabilities?

A Review of the Literature

Carmel Duggan and Michael Byrne

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Carmel Duggan and Michael Byrne, WRC Social and Economic Consultants Ltd

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Foreword

The NCSE is pleased to publish this research report on what the research evidence has to tell us about 'what works' in higher, further and continuing education, training and rehabilitation for adults with disabilities.

The review looked at the literature to examine what measures help adults with disabilities to access, participate in and progress from education, training and rehabilitation. It also includes detailed case studies on effective programmes identified in the USA, Canada, Australia, New Zealand and the UK.

The findings showed that there are many general features of effective provision that could be replicated in all settings at all stages of the student journey. These included:

- setting clear targets and objectives
- identifying and removing barriers such as negative attitudes on the part of tutors or the costs of participation
- having a client-centred approach within an overall inclusive context including individual education and progression plans
- empowering the person with a disability through enabling them to decide their own plans and to advocate on their own behalf to achieve them
- providing high quality guidance
- facilitating natural or peer supports.

The review found that legislation alone is not enough to make sure that adequate services are provided to adults with disabilities. Staff training is also needed about the appropriate ways to teach adults with disabilities.

This report also presents evidence on specific approaches to ensuring effective access to, participation in and progression from the various education and training sectors. The evidence available in this report and another recently published NCSE report, *Moving to Further and Higher Education: An Exploration of the Experiences of Students with Special Educational Needs* by Conor Mc Guckin, Michael Shevlin, Sheena Bell and Cristina Devecchi, should be of great interest to those providing higher, further and continuing education, training and rehabilitation for adults with disabilities.

Teresa Griffin, Chief Executive Officer

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Glossary of Acronyms

AHEAD Association of Higher Education Access and Disability

ANED Association of National Experts on Disability

ASD Autism Spectrum Disorder

BTEI Back to Education Initiative

CICE Community Integration through Co-ordinated Education

DARE Disability Access Route to Education

DES Disability Employment Services

DFI Disability Federation of Ireland

DPO Disabled Peoples Organisations

EPSEN Education of Persons with Special Educational Needs

ETB Education and Training Board

FET Further Education and Training

GTO Group Training Organisation

HEA Higher Education Authority

HSE Health Service Executive

ICT Information Communication Technology

IEP Individual Education Plan

ILO International Labour Organisation

INOU Irish National Organisation of the Unemployed

IPE Integrated Plan of Employment

IPSE Inclusive Post-secondary Education

ISCED International Standard Classification of Education

NALA National Adult Literacy Association

NCSE National Council for Special Education

NDA National Disability Authority

NGO Non-governmental Organisation

OECD Organisation for Economic Co-operation and Development

PLC Post-Leaving Certificate

SLC Student Learning Community

STEM Science, Technology, Engineering, Maths

UD/UDI/UDL Universal Design/in Instruction/in Learning

UN United Nations

Glossary of Acronyms

UNICEF United Nations International Children's Emergency Funds

UNESCO United National Education, Science and Cultural Organisation

VEC Vocational Educational Committee

VET Vocational Education and Training

VTOS Vocational Training Opportunities Scheme

WHO World Health Organisation

Executive Summary

This literature review was commissioned by the National Council for Special Education and conducted between July and December 2012. Its objectives were (a) to explore existing evidence of 'what works' in higher, further, continuing education, vocational training and rehabilitation provision for adults with disabilities and (b) to present evidence of effective practice that may contribute to developing policy in Ireland for the education, training and rehabilitation of people with disabilities. Its terms of reference comprised two main elements:

- a review of relevant literature pertaining to effective practice in providing higher, further and continuing education, training and rehabilitation of people with disabilities
- case studies detailing specific examples of effective practice considered particularly relevant.

Definitions and Conceptual Framework

It was necessary at the outset to establish definitions of the key terms. As the literature review considered international material, the definitions were developed on the basis of the international literature rather than on practice and terminology in Ireland. Notwithstanding considerable variation in the definitions within the literature, mutually exclusive categories were established and these are noted below along with examples of each category in Ireland. Following this, a conceptual framework was developed to guide the literature review. This was based on the three key stages in the student journey: access, participation and progression. On this basis, the review explored material on measures to facilitate adults with disability to access higher and further education, adult and continuing education, vocational training and vocational rehabilitation (Chapter 3); measures to support their participation in these forms of provision (Chapter 4) and measures to support their progression from them (Chapter 5).

Definitions of education and training and examples from Ireland

Category	Examples from Ireland
Higher Education: programmes provided by higher institutions of education which lead to degree level qualifications or equivalent.	Degree courses provided by the university sector, the institutes of technology and the colleges of education, including both Statefunded and private colleges.
Further Education: post-compulsory provision which is frequently although not exclusively linked to progression from the second level system but which excludes degree courses.	Post Leaving Certificate courses Diploma and certificate courses Youthreach Access courses
Continuing or Adult Education: provision for adults that is (a) not covered by the term higher or further education nor (b) not directly linked to progression from second level.	Adult literacy programmes, adult education programmes provided/funded by the Vocational Education Committees including second level courses, courses provided by community organisations
Vocational Training: all vocational courses provided for adults (including unemployed adults) and which are directed towards the acquisition of skills directly linked to securing or advancing in employment.	FÁS Skills Training for the unemployed/ employed Sectoral skills training provided by bodies such as Teagasc, Failte Ireland etc. Skills training delivered by the private sector Special training provision for people with disabilities
Vocational Rehabilitation: considered to be provision comprising individually tailored services, with the objective of enabling retention of or return to employment.	No current examples*

^{*} While this specific model is not in place in Ireland, elements of it are provided by the National Learning Network as part of its support and training provision for people with disabilities.

The conceptual framework is summarised below along with examples of measures at each stage of the education/training process and key indicators of effectiveness.

Conceptual framework and examples of provision

Stage in Educational Process	Examples of Interventions			Examples of Outcome Indicators
	at the level of the student	at the level of the institution/service provider		
Access	Outreach strategies	Transition progra	mmes	Enrolments
	Information provision	Differentiated ass	essments	Type of courses
	Personal transition plans	Differentiated ma	triculation	undertaken
	Guidance and advice	processes		Level of courses
		Remission of fees		undertaken
		Universal design	in education	
Participation	Needs assessment	To support	To support	Completion rates
	Finance for subsistence	participation	learning	Accreditation rates
	Assistant personnel	Transport	Pedagogies	Level of accreditation
	Befriending schemes	Modified	Teacher training	
	Assistive technology	buildings Differentiated		
	Guidance		course material	
	On hand support	Universal design		
			in learning	
Progression	Career planning	Progression programmes		Progress to education/
	Guidance	Formal links to employers		training .
	Work placements			Progression to employment
				Retention/return to work

Methodology

The methodology was based on a wide-ranging literature search using online search engines, journal directories, websites, and author searches. In total 98 articles and reports were reviewed. This figure excludes a large number of documents incorporated to provide background information, critical comment or to inform the discussion of the policy context. The 98 reviewed articles and reports were rated using a quality control system which referenced (a) the focus of the material (b) the appropriateness of the methodology and (c) the inclusion of data relating to outcomes. Weaknesses in the literature were also identified, particularly regarding lack of detail on implemention, outcomes, and funding mechanisms. Five case studies were developed based on review findings. These amplified elements of effective provision, where identified, and provided more detail on the specific actions to implement the measures and on outcomes. The literature review is prefaced by a discussion of international and Irish policy for disability and an overview of educational and training provision and participation by adults with disabilities in Ireland. This discussion highlights the similarities and differences between Ireland and other countries looked at here.

Findings

The literature review highlighted some overarching issues. First, a significant imbalance exists in the peer reviewed literature such that the bulk of this relates to higher and further education (usually undifferentiated). Material relating to vocational training tends to be published by international and national organisations working in this area rather than in the academic journals. A particular issue is the dearth of literature relating to adults with disabilities availing of adult education. An additional and significant overarching issue is the lack of transfer of good practice or learning across educational sectors or between the arenas of education and vocational training.

Chapter 3 reviewed the literature regarding access to educational and training provision for adults with disabilities. It considered material pertaining to transition programmes, outreach strategies, modified entry criteria, targeted provision for adults with intellectual disability, measures to promote participation in vocational training and routes to vocational rehabilitation. The findings from this material indicated that well-resourced transition programmes, based on student participation, good information and professional involvement can be effective in providing a route to higher and further education for students with disabilities. In particular, the benefits of training in self-determination were noted. Outreach measures, mostly web-based, were also highlighted as was the DARE Initiative in Ireland which incorporates web-based resources for students with disabilities with other measures to facilitate access to higher education. Specific measures to enable students, including adults, with intellectual disabilities, to participate in higher education were also noted. Most are drawn from Canada and stress full inclusion rather than special provision. On access to vocational training, the material is much more limited. Here, however, the positive role which disability organisations may play in supporting adults with disabilities to access vocational training was highlighted.

On measures to support participation in education, training and rehabilitation, Chapter 4 reviewed material pertaining to supports provided by and within institutes of higher and further education and material pertaining to measures to promote inclusive vocational training. The tendency for the latter to focus on broad strategies and frameworks rather than specific measures was noted. Chapter 4 also examined participation in vocational rehabilitation programmes. In general, the literature in this chapter (which again referred mostly to higher and further education) indicated that measures focused on the specific needs of the individual, incorporating personal choice and good information were effective. The ability to self-advocate emerged as an important element and programmes providing training in this were generally considered to be effective in supporting participation in higher and further education. Chapter 4 also looked at the literature on measures implemented at the level of the institution including universal design and the use of ICTs. The need for an appropriate balance between such measures and those targeted at individuals was noted.

Overall, the literature review for higher and further education concludes that while practices supporting adults with disabilities in higher and further education are extensive and diverse, there is no one single solution to the challenges arising and

careful monitoring of practice is required to ensure that innovations and measures are achieving their objectives and are not systematically excluding categories of disabilities.

In vocational training, Chapter 4 noted that while inclusive provision is called for internationally, the literature provides few examples of how this can be achieved. Provision of support as needed by individuals in the area was also found to be important and again, disability organisations were shown to potentially have a role in this. The identification and removal of all barriers to participation including, where necessary, addressing the negative attitudes of tutors and fellow students, was also shown to be important. In vocational rehabilitation, the literature suggests a case management approach, incorporating 'consumer choice' contributes to the model's success. No literature relating to supporting the participation of adults with disabilities in adult and continuing education was found.

Chapter 5 reviewed the literature on measures to support progression from education, training and rehabilitation for people with disabilities. It focused on interventions to ensure positive outcomes from education and training for adults with disabilities. Such measures are far less frequent than those to support transition to education and most of the literature relates to progression to employment rather than to post-graduate education. Effective interventions within higher and further education institutes include building direct links between the educational course and the world of work and ensuring that students develop self-efficacy in their careers. In vocational training, employment trial models, disability employment services and embedding progression supports within the training programme were all noted. Vocational rehabilitation is the only arena in which a successful outcome is defined – in this case securing and maintaining employment for a minimum of 90 days. Job placement services are central to this model and the literature has some evidence that these services are of primary significance in securing positive outcomes here.

Overall, the literature review also found that legislation alone is insufficient to ensure adequate service provision for adults with disabilities, or in some cases, any at all. Staff training is hugely important and this holds not just for training in appropriate pedagogies or universal design but also in legislative requirements. Consultation with adults participating in education and training programmes was also shown to be necessary, as was ongoing monitoring of the impact of the various interventions. A summary of effective interventions is provided in the following table.

Summary of effective interventions

Stage	Sector	Intervention	Evidence Base	Key Factors Associated With Success
Access	Higher and further education	Transition services	Critical mass* US Canada Australia	Young person and family involved Self -determination training Good information Transition specialist
	Higher and further education	Differentiated application process	Several interventions UK Ireland	Outreach Good information Simplified application process
	Adult and continuing education	Inclusive education in university settings	Critical mass* Canada	Adult pedagogy Mentors
	Vocational training	Inclusive apprenticeship training	Single intervention Australia	Outreach to participants Role for disability organisations Direct approach to employers
Participation	Higher education	Self- determination	Critical mass	Mentoring Skills to self-direct
	Higher education	Universal Design in Learning	Critical mass US	Teacher training
	Higher education	Auditing of courses and curricula	Single intervention UK	Staff involvement in auditing Focus on practical issues
	Vocational training	Inclusive apprenticeship training	Single intervention Australia	Removal of barriers Ongoing support
Progression	Higher education and vocational training	Progression supports embedded in training/ education programme	Several interventions Multiple sites	Direct link to employers Vocational guidance Practical support with job matching, interview preparation etc
	Vocational training	Disability employment services	Several interventions Multiple sites	Dedicated services Advocacy on behalf of candidate Direct link to employers
	Vocational rehabilitation	Case managed, client-centred approach	Critical mass* US	Adequate funding Career guidance Job planning

^{*}Sources cited are indicative of critical mass of literature in this area

Case Studies

The review includes five case studies, selected on the basis of the literature. They relate to the following:

Summary of case studies

Sector	Case Study	Country
Higher and further education	Training in self-determination for undergraduates	USA
Higher and further education	Inclusive education through design	Scotland
Adult and continuing education	Third level for people with intellectual disability	Canada
Vocational training	Inclusive vocational training model	Australia
Vocational rehabilitation	Federal vocational rehabilitation programme	USA

The case studies refer to the empirical and policy context for the interventions, their objectives, method of delivery and the main outcomes. They relate to the different categories of education and training, as defined in this review, but the learning from them can potentially be transferred to other sectors. In addition to the specific effective practice highlighted within each case study, common elements were also identified. These include, again, the benefits of consultation with adults with disabilities, the importance of staff training, the scope to provide fully inclusive measures based on robust definitions of 'inclusion', the potential contribution of properly designed and managed interagency co-operation and the benefits of structured supports for progression. Clearly articulated objectives and targets are also important.

Implications for Irish Policy Development

The literature review's implications for developing overall approaches to measures supporting the provision of higher, further, continuing and adult education, vocational training and vocational rehabilitation for adults with disabilities were highlighted. The potential to transfer learning across education and training sectors was noted, though caution is required here given the challenges in doing so, including challenges associated with different types of disabilities. Generic features of provision which could be replicated were identified as:

- clear understanding of the terms inclusive education or inclusive training
- · clear targets and objectives
- identifying and removing barriers
- client-centred approach within an overall inclusive context
- individual education and progression plan
- empowerment
- natural supports and peer supports
- provision of high quality guidance.

The implications of the review's findings for developing policy and practice in Ireland were noted in several areas: administration and governance; development and deployment of personnel; institutional factors; and the involvement of people with disabilities in the design and delivery of measures to support their access to, participation in and progression from, higher and further education, adult and continuing education, vocational training and vocational rehabilitation. In the context of continuing reform of the further education and training sector, including the creation of the Education and Training Boards (ETBs) the following issues were identified as those which, on the basis of this literature review, could be considered in developing policy in Ireland.

- The establishment of rigorous data gathering and monitoring systems across all service providers including the new ETBs. The boards themselves provide an invaluable opportunity to ensure consistency of data across the new structures.
- The introduction of mechanisms to disseminate and transfer good practice within
 and across sectors and to absorb learning from successful pilots. Again, the
 new boards provide an opportunity for developing such mechanisms within the
 further education and training sector. The setting up of SOLAS should also offer an
 opportunity for links between this agency and the HEA to ensure transfer across
 sectors.
- The elimination of all administrative barriers to participation in education and training and the recognition of the costs of participation.
- The development and deployment of specialised personnel in supporting all key stages in the student journey including transition, participation and progression.
 The potential for those with disabilities to occupy such roles also warrants consideration.
- At institutional level, there is a need to balance system wide measures with measures to address the needs of individuals.
- Consultation with people with disabilities could help to ensure that measures are being delivered in line with legislation and regulations, that unmet needs or gaps are identified and that measures are achieving their objectives.

Learning in relation to the development of specific programmes or interventions was also noted. Relevant programmes and services in this regard were identified as:

- transition services
- training in self-determination
- interventions to support access to adult education and inclusive vocational training, vocational guidance
- disability employment services.

1 Conceptual Framework and Methodology

1.1 Introduction

This literature review aims to explore existing evidence of 'what works' in higher, further, and continuing education, training and rehabilitation provision for adults with disabilities. Commissioned by the National Council for Special Education, the work was undertaken between July and December 2012, by WRC Social and Economic Consultants. The terms of reference had two main elements:

- a review of relevant literature pertaining to effective practice in providing higher and further education, continuing education, training and rehabilitation of people with disabilities
- case studies detailing specific examples of effective practice considered particularly relevant.

The overall objective is to explore and present evidence of effective practice that may contribute to developing policy in Ireland on the education, training and rehabilitation of adults with disabilities. The specific aims of the review, as detailed in the Terms of Reference were:

- to give the NCSE a sharper understanding of this field
- to identify potential best practice in providing education, training and rehabilitation supports for adults with disabilities, nationally and internationally.

The study's key tasks were:

- to scope and define key terms and develop a conceptual framework for the study
- to locate the study in an overview of provision in this field in the irish context
- to use the conceptual framework to review the relevant literature and to help identify potential best practice in providing these supports to adults with disabilities, highlighting evidence of demonstrated outcomes where possible
- drawing on the literature, and in consultation with NCSE, to select a number of countries/jurisdictions as potential best practice case studies to be explored in more detail for the study, providing a rationale for this selection
- to provide an analysis of the trends emerging from the literature review and country case studies and compare to the irish context
- to provide the NCSE with a full report from the project and a user-friendly research briefing.

Chapter 1 examines the context for the review, defines key terms, discusses the conceptual framework which underpinned the review and presents the methodology.

1.2 Context for the Review

It must be stated at the outset that there is no standard definition of disability either internationally or within national contexts and frequently definitions reflect the specific objectives of the source document. In Ireland, the Disability Act 2005 defines disability as: '... a substantial restriction in the capacity of the person to carry on a profession, business or occupation in the State or to participate in social or cultural life in the State by reason of an enduring physical, sensory, mental health or intellectual impairment' (p6). In contrast, the Education for Persons with Special Educational Needs Act 2004 defines special educational needs as 'a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition'. (p6).

The dominant trend over the past three decades, however, has been for definitions of disability to reflect the shift from a medical to a social model and to incorporate a focus on environmental factors. Thus, the United Nations Convention on the Rights of People with Disabilities agreed in 2006 defines such people as 'those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others'. Central to the social model is the recognition that disability is not considered a personal problem or attribute, but is seen as a complex collection of conditions many of which are created by the social environment. That it, disability is a social problem and it is society's collective responsibility to make the environmental modifications necessary for the full participation of people with disabilities in all areas of social life.

This approach is now reflected in international and national policy frameworks for disability. A cornerstone of these frameworks, which are frequently embedded in a human rights approach, is the emphasis on independent living, social inclusion and mainstreaming. Education and training are key mechanisms in enabling people in general to live, work and contribute to their societies so not surprisingly, education, vocational training, access to employment and rehabilitation are major focal points that have emerged in recent years, as discussed in Chapter 2. This has resulted in interventions which aim to improve educational, training and rehabilitation provision and outcomes for adults with disabilities including measures to promote integration into mainstream education and training settings. Despite some success evident in an increase in young people with disabilities remaining in post-compulsory education, the degree of inclusion in education and training envisaged by international and national policy objectives has not been achieved (ANED, 2010). Recent reports show young disabled people continue to be less likely to access higher education than their non-disabled peers (ANED, 2010). In Ireland, while the overall rate of access to tertiary education rose by 8 per cent during 2000-06, the rate for disabled students went up by only 2.6 per cent. They are also more likely to face discontinuities in their studies in higher education (ANED, 2011). In addition, according to the Organisation for Economic Co-operation and Development (OECD), disabled students tend to be more likely than non-disabled students to follow part-time courses, to drop out after the first year and are also less likely to graduate (OECD, 2010). Studies have also found that the growing

presence of young disabled people in all levels and sectors of education seems to have had a relatively minor impact on their employment opportunities (OECD, 2008; ANED, 2010).

These data highlight the need for ongoing review, monitoring and development of more appropriate and effective policies and measures to support participation in education and training on the part of adults with disabilities. Moreover, these measures are required in all relevant sectors including higher, further and continuing education, training and rehabilitation and these different sectors are the focus of this literature review. To ensure a structured and comprehensive approach to reviewing the international literature, we first developed a conceptual framework, grounded in contemporary definitions and understandings of these categories. In developing this framework, our overall objective was pragmatic: to facilitate a structured categorisation of the literature to ensure comprehensiveness and make sense in terms of the actual systems of education and training provision in Ireland and elsewhere.

A particular challenge to this was inconsistent definition within the literature and the considerable overlap in understanding of the various categories of education and training examined here. In response to this we tried to ensure comprehensive coverage of the spectrum of education and training provision for adults with disability. Thus, we developed mutually exclusive definitions of the various levels of education and training referenced above. As a result the definitions of higher, further and continuing education, vocational training and rehabilitation used in this review minimise ambiguity and allow for no overlap between these various terms. This approach was necessary to eliminate inconsistencies and vagueness and to underpin the conceptual framework. We were aware, from the outset, that the existing literature would not always allow us to situate the data or research findings as neatly into our categories as we would have wished. Nevertheless we believe the definitions and conceptual framework we have developed for this review are the most useful in terms of enabling a clear assessment of what areas of education and training effective practice can be identified within and conversely of those areas where gaps exist.

The analysis of current definitions which informed development of the conceptual framework is provided in Annex 1. In the following section, the framework itself is presented. Two preliminary points should be noted here. First, in this review, the term 'adult' is not defined by age, but refers to those who have left or are about to leave the second level education system. Second, reflecting the predominant practice in the literature, all categories of disability are included in this review.

1.3 Conceptual Framework

The conceptual framework is built on these three elements

- Category definitions of higher, further, continuing education, training and rehabilitation.
- The definition of education per se put forward by the ISCED and which emphasises the process and the transfer of learning.

 The definition of inclusive education put forward by the European Agency for Development in Special Needs Education (EADSNE).

These are fully discussed in Annex 1 and are also briefly recapped below.

1.3.1 Definitions of education and training categories

The definitions developed for the purposes of this review are mutually exclusive. While we recognise that much of the literature does not utilise such definitions, this approach facilitated a more comprehensive coverage of the literature and also allowed us to identify areas which appear to have limited provision or data. The definitions along with examples of Irish provision under each category are summarised in Table 1.

Table 1. Definitions of education and training and examples from Ireland

Category	Examples from Ireland
Higher Education: programmes provided by higher institutions of education which lead to degree level qualifications or equivalent.	Degree courses provided by the university sector, the institutes of technology and the colleges of education, including both Statefunded and private colleges.
Further Education: post-compulsory provision which is frequently although not exclusively linked to progression from the second level system but which excludes degree courses.	Post Leaving Certificate courses Diploma and certificate courses Youthreach Access courses
Continuing or Adult Education: provision for adults that is (a) not covered by the term higher or further education nor (b) not directly linked to progression from second level.	Adult literacy programmes, adult education programmes provided/funded by the Vocational Education Committees including second level courses, courses provided by community organisations
Vocational Training: all vocational courses provided for adults (including unemployed adults) and which are directed towards the acquisition of skills directly linked to securing or advancing in employment.	FÁS Skills Training for the unemployed/ employed Sectoral skills training provided by bodies such as Teagasc, Failte Ireland etc. Skills training delivered by the private sector Special training provision for people with disabilities
Vocational Rehabilitation: considered to be provision comprising individually tailored services, with the objective of enabling retention of or return to employment.	No current examples*

^{*} While this specific model is not in place in Ireland, elements of it are provided by the National Learning Network as part of its support and training provision for people with disabilities.

1.3.2 Definitions of education and inclusive education

The ISCED's definition of education, accepted by other international agencies, refers to the key features of the process of education as communication; organised; sustained; and learning. Extending these key features to the other categories looked at here, we can

suggest that education, training and rehabilitation can be understood as (a) involving a process (b) incorporating the transfer of learning and (c) directed at outcomes which may or may not be specified.

The EADSNE defined inclusive education in terms of the following dimensions:

- presence: access to education and school attendance
- participation: quality of the learning experience from the learner perspective
- achievement: learning processes and outcomes.

The EADSNE is here specifically referring to education within the formal mainstream school setting, but the principles of presence, participation and achievement can be extended to all forms of education and training. This approach effectively distinguishes between three stages in the educational and training process:

- initial stage (presence) of enrolment in a programme
- second stage of participation
- final stage of achievement or progression.

This three-stage process is reflected (implicitly) in a wide range of literature pertaining to inclusive education and training. For example, the concept of the student journey, frequently used to describe the learner's experience, implicitly contains ideas of movement to, through and beyond the learning programme. Similarly, Tomasevski distinguishes between rights to, in and through education (Tomasevski, 2001). The first can be linked to policies and practices related to admission/access (education being available and accessible). Rights in education relate to equitable processes of education (education being adaptable and acceptable). Rights through education cover policies and practices related to attainment, transition and destination (education being applicable and acknowledged). This approach is also compatible with what has been called the input, process and outcome model generally used by international agencies (such as the European Commission and the OECD) to analyse the effectiveness and equity of education systems. Such an approach is also advocated by the EADSNE in the indicators for inclusive education project work (EADSNE) (2009: p40).

In developing the conceptual framework we utilised these three elements of the student journey with the preceding definitions. Thus, we examined the literature on each category of education and training as previously defined in relation to:

- Provision to enable people with disabilities to access educational and training programmes. Examples from across the range of categories looked at here include:
 - individualised planning
 - information and guidance including outreach strategies
 - differentiation of entry requirements
 - formal links between providers at different levels of the system
 - access programmes.

- Provision and supports which enable people with disabilities (a) to participate fully in these programmes and (b) which facilitate transfer of learning. Examples include:
 - financial supports
 - personal supports (note-takers etc)
 - differentiation of course content, assessment
 - befriending programmes
 - differentiation of teaching style, teacher time
 - differentiation of access (buildings/mapping etc).
- Provision which enables people with disabilities to make successful transitions in terms of educational progression, employment or other forms of transition.
 Examples here include:
 - direct links to next level of education
 - direct links to employment opportunities
 - personal career planning
 - quidance.

These supports can be provided to the student themselves or may be applied at the level of the institution (the learning provider). In both cases the intervention may stem from system or policy level provision. Universal design is also relevant here, of course, and will be addressed. The concept relates to access (where it pertains mostly to the physical environment or to the provision of information) and participation — which is reflected in terms such as universal design in instruction or in learning. These terms refer to practices in course design, teaching methods and assessment.

Table 2 below summarises the conceptual framework, giving examples of interventions within each stage of the educational/training process and also the key indicators of effectiveness.

Table 2. Conceptual framework and examples of provision

Stage in Educational Process	Examples of Interventions			Examples of Outcome Indicators
	at the level of the student	at the level of the provider	institution/service	
Access	Outreach strategies	Transition progra	mmes	Enrolments
	Information provision	Differentiated ass	essments	Type of courses
	Personal transition plans	Differentiated ma	triculation	undertaken
	Guidance and advice	processes		Level of courses
		Remission of fees		undertaken
		Universal design	in education	
Participation	Needs assessment	To support	To support	
	Finance for subsistence	participation	learning	
	Assistant personnel	Transport	Pedagogies	Completion rates
	Befriending schemes	Modified	Teacher training	Accreditation rates
	Assistive technology	buildings Differentiated		Level of accreditation
	Guidance	course material		
	On hand support	Universal design in learning		
Progression	Career planning	Progression programmes		Progress to education/
	Guidance	Formal links to employers		training
	Work placements			Progression to employment
				Retention/return to work

This framework guided the search for literature: the review is detailed in Chapter 3 (interventions to support access), Chapter 4 (interventions to support participation and retention) and in Chapter 5 (interventions to support progression). The effectiveness of the various interventions was assessed in terms of quantitative and qualitative data as far as is possible given the literature limitations. Thus, in provision to facilitate access, indicators of effectiveness such as the numbers of people with disabilities enrolled for various programmes and the type and level of the programmes for which they enrol are presented wherever available, although this is infrequent. For provision to support participation, indicators such as completion and accreditation rates and level of accreditation achieved are presented, again when available. Provision to support progression is assessed via the rate of progression to additional educational and training programmes or to employment, where data permit. Along with these quantitative indicators, wherever possible, qualitative data on student views and experiences are also presented.

1.4 Methodology

The conceptual framework previously outlined involves a matrix incorporating, on the one hand, definitions of the various education and training sectors and, on the other, the three key stages in the student journey: access to, participation in and progression from

education or training. In undertaking the literature search, we used these parameters, as far as was practical, to undertake a comprehensive literature search in order to facilitate a broad ranging review to cover all types of provision for adults with disabilities. Given the focus of the study on what works in the provision of higher, further, continuing and adult education, vocational training and vocational rehabilitation for adults with disabilities, we hoped to review literature which had either a primary or major focus on evaluation, or which otherwise provided evidence of effectiveness. We also hoped to place a particular but not exclusive emphasis on peer reviewed material relating to service provision and on material that references the views of service users. In the literature search, however, a number of problems arose. First, evaluation studies proved scarce and thus the type of robust evidence of effectiveness which we had hoped to find was, for the most part, unavailable. Second, many peer reviewed studies that appear in journals have limitations (frequently noted by the authors themselves), including very small sample sizes, an overly narrow focus, a failure to describe the intervention in any detail, a lack of information on the type of disabilities included in the study, and most significant of all, a lack of detailed data on outcomes. In addition, significant gaps exist such that the vast bulk of the literature is focused on higher and further education and usually without differentiation between the two sectors. A much smaller body of literature relates to vocational training and vocational rehabilitation, and almost no literature to continuing and adult education.

As a result, it is difficult to emphatically answer the question 'what works in the provision of higher, further, continuing and adult education, vocational training and rehabilitation for adults with disabilities?' Nonetheless, on the basis of the extensive literature review and case studies, it has been possible to identify a range of interventions, approaches and forms of provision which do appear to be effective in enabling adults with disabilities to access, participate in and progress beyond education, training and rehabilitation programmes. These include educational and training measures focused at school leavers and at adults and include interventions focused on the individual, as well as those implemented at institution level. These are discussed in the data Chapters 3 to 5 and also inform the case studies in Chapter 6.

1.4.1 Search parameters

Timeframe: The review was largely confined to material published in the past 12 years or so (however particularly relevant older material is also included). The principal reason for thus limiting the timeframe was to ensure the review focused on the most useful and relevant material currently available and also to allow the study to be undertaken in the time available. The ratification of the UN Convention on the Rights of People with Disabilities by a large number of countries post 2006, and the subsequent development of disability and independent living strategies by many countries has increased the literature available in the recent past. Ongoing developments in service delivery continually influence knowledge and understanding. Thus we endeavoured to draw on the most relevant and recent research.

Jurisdiction: Material published in or relating to the following jurisdictions was included in the search parameters: Republic of Ireland, United Kingdom, USA, Australia,

Canada and New Zealand. The rationale here was to confine the review to original material published in English, while ensuring a focus on jurisdictions with social policy frameworks regularly referenced by their Irish counterparts. A few studies from other countries were also included, where particularly relevant.

Type of literature: We confined the literature review, for the most part, to three main bodies of work. These are:

- material published in journals including disability specific journals and those relating more broadly to education and training
- material published by international disability organisations pertaining to education, training and rehabilitation
- material published by international organisations in education, training or rehabilitation.

Exclusion criteria were applied as follows to literature which:

- did not directly relate to key themes of the review
- was focused on children rather than adults
- did not relate to interventions or types of interventions
- focused solely on outcomes at the emotional or social level.

In addition, material on interventions which do not correspond to the definitions of higher, further, adult and continuing education, vocational training and vocational rehabilitation were excluded. As a result, services to adults with disabilities such as day care services and occupational therapy programmes have been excluded.

1.4.2 Search methodologies

Given the breadth of the topic being examined, it was necessary to use several search methodologies.

- Initially, a general search of international agency websites on disability or education/training was undertaken. This allowed us to develop the conceptual framework and definitions previously discussed. It produced mostly policy statements or international reviews.
- A detailed search of online journals initially focused on ERIC, INFOMINE, OPENJGATE and DOAJ (Directory of Open Access Journals). It quickly became apparent that this was duplicative and the search was then confined to ERIC, the most comprehensive database for education and training research. Two categories of descriptors (search terms) identified articles: the first referred to aspects of provision/outcomes and comprised the terms 'outcomes'; 'best practice'; 'good practice'; 'transition'; participation and 'progression'; the second referred to the sectors of education and training and comprised 'higher education'; 'tertiary education'; 'university'; 'further education; 'adult education'; 'continuing education'; 'training'; 'vocational training'; and 'vocational rehabilitation'. In addition the descriptors 'employment', 'work', and 'labour market' were used to identify potential literature

on employment outcomes. Using the advanced search tool, searches identified articles which featured the words 'disability'/disabled' and two or more of the additional descriptors noted above. Initially, these terms generated huge numbers of hits (see Table 3). A scan of the initial titles produced indicated that most articles were irrelevant to the review. Reasons for this have already been noted above: for example where the focus was on young people still in the second level school system; or where the study dealt with the experiences of students per se and the barriers to participation, rather than to provision to overcome those barriers. In other instances it was clear that the primary theme was the emotional or social impacts on students and often very few students. The scan allowed us to identify 76 articles of direct relevance to this review.

Table 3. Summary of outcomes of initial literature search

Disability and	No of hits	No of abstracts examined	No of articles retrieved for review
Higher education	673	30	20
University	256		
Third level education	23		
Tertiary education	6		
Further education	67		
Continuing education	51	5	4
Adult education	276		
Vocational education	124	36	6
Vocational training	109		
Vocational rehabilitation	72	19	7
Outcomes	91	31	8
Good practice	16	6	4
Best practice	27		
Progression	25	3	2
Transition	190	20	18
Employment	100	12	7
Work	144		
Labour market	26		
Total		162	76

An initial review of the material allowed us to identify key forms of practice and
provision and specific interventions. Based on this and to ensure the review was
as comprehensive as possible, we then reviewed journals relating to education,
disability and social policy which we considered particularly relevant for this review
(a list of these is provided in Table 4). These were then subjected to a detailed
contents search using the search engines of relevant content managers or databases
such as Taylor and Francis, Academic Search Complete, Sage, or Wile Online Library.

- The same descriptors noted previously were sometimes modified according to the nature of the specific journals. This search produced a further 23 articles.
- Much of the journal-based literature focused on education rather than training. To compensate for this, a further search of relevant websites was undertaken. This included the websites of vocational training organisations, disability organisations, disability research databases, international agencies working in health, disability, education, training and employment This allowed us to identify a further 17 reports many of which were compilations or reviews of provision from countries, rather than specific studies.
- Where prominent authors were identified in a specific field, the complete
 publications for those authors was reviewed. These were available on staff web
 pages of the author's institution. Five articles were sourced in this way.
- Finally, approaches were made to relevant agencies to source additional material.
 These included Aontas, NALA, AHEAD and the NDA. This resulted in a further five reports or articles being included. In addition, reports and statistical documents were downloaded from the websites of relevant agencies and Initiatives, such as FÁS, the HEA and Youthreach and was used for context and statistical information.
 The study's research advisory group also provided contextual and statistical information.

Table 4. Specific journals searched

- 1. Journal of Postsecondary Education and Disability
- 2. Journal of Special Education and Rehabilitation
- 3. International Journal of Disability, Development and Education
- 4. Journal of Special Education
- 5. Disability, Culture and Education
- 6. Advances in Special Education
- 7. British Journal of Special Education
- 8. European Journal of Special Needs Education
- 9. Journal of Occupational Psychology, Employment and Disability
- 10. Career Development and Transition for Exceptional Individuals
- 11. Journal of Vocational Rehabilitation
- 12. Disability and Rehabilitation
- 13. International Journal of Disability, Community and Rehabilitation
- 14. Journal of Social Work in Disability and Rehabilitation
- 15. International Journal of Rehabilitation Research
- 16. Disability and Society
- 17. Journal of Disability Policy Studies
- 18. Disability Studies Quarterly
- 19. Journal of Intellectual Disabilities
- 20. Journal of Policy and Practice in Intellectual Disabilities
- 21. Technology and Disability
- 22. Journal of Applied Research in Intellectual Disabilities
- 23. British Journal of Learning Disabilities
- 24. Support for Learning
- 25. Higher Education

- 26. Irish Educational Studies
- 27. Irish Journal of Education
- 28. The All-Ireland Journal of Teaching and Learning in Higher Education
- 29. The Adult Learner
- 30. Education
- 31. International Journal of Educational Research
- 32. International Journal of Educational Development
- 33. International Review of Education
- 34. Journal of Educational Change
- 35. Research in Higher Education
- 36. British Journal of Educational Studies
- 37. Journal of Vocational Education and Training
- 38. British Journal of Sociology and Education
- 39. Irish Journal of Sociology
- 40. Sociological Research Online
- 41. British Journal of Sociology
- 42. Journal of Sociology
- 43. Sociology
- 44. American Journal of Sociology
- 45. Canadian Journal of Sociology

1.4.3 Overview of literature

The result of these methodologies was retrieval of 126 articles or reports directly relevant to the study. Of these, 28 were discarded, resulting in 98 reports for review. The review's main features and limitations are noted below.

National context

Most material sourced from the journals covers US provision. Literature from the UK and Australia is also reasonably well represented, particularly in reports rather than journal articles. Interesting material from other EU countries was also retrieved (Germany, Sweden, Norway). Surprisingly little was found relating to New Zealand and to a lesser extent Canada.

Types of disability

A substantial number of the studies deal specifically with intellectual disabilities, frequently without indicating the severity involved. Besides this, the literature refers only infrequently to the nature of the disability and almost never to its level. An exception is the handful of articles focusing on specific categories of disabilities such as mental health or sensory disabilities.

Education/Training Sectors

As we anticipated in developing the definitions and the conceptual framework, the literature did not always fit neatly into our categories. An approximate classification of these articles and reports as per our main categories is as follows:

Table 5. Literature categorised by sector

Educational Level	No of Articles
Overarching issues	7
Higher/further education combined*	54
Vocational training	22
Adult/continuing education	3
Vocational rehabilitation	12
Total	98

^{*} In the US, the literature does not distinguish between higher and further education. Thus the two are combined here. In the subsequent chapters, the discussion identifies which sector is being discussed, wherever possible.

As Table 5 shows, material relating to higher and further education predominates reflecting the research interest in the transition from second level school to other educational institutions. Material on adult and continuing provision is far less common. Given the imbalance in the spread across the various sectors, it was explicitly decided to limit the number of studies from the higher and further education sector to allow inclusion of literature from other sectors.

1.4.4 Quality assessment

To provide the reader with a quality guide to the material referenced, an assessment system was developed to rank the relevance of the various studies and reports. As previously noted, much of the literature on vocational training is compilation reports which draw together information and data from several countries. This is in marked contrast to the material on higher and further education which is includes journal articles detailing studies of specific measures or reviewing small amounts of literature pertaining to specific interventions. In view of this, we developed two quality assessment approaches: one for studies and one for compilation reports.

Journal articles: Each study was rated along three dimensions: having a direct focus on access, participation or progression in the categories of education, training and rehabilitation of concern here; having an appropriate methodology with no major limitations; and, providing evidence of the effectiveness of a measure or overall approach. For the first category, studies were scored with a single asterisk. Only those studies scored with an asterisk on the first element were rated on the second two. Studies which had both a direct focus and an appropriate methodology were rated with two asterisks and the letter 'a'. Those that had a direct focus plus evidence of effectiveness were rated with two asterisks and the letter 'b'. Studies which contained all three elements were rated with three asterisks.

Reports: Compilation reports were selected on the basis of their focus (on vocational training for people with disabilities); on the comprehensiveness of their coverage of the issues and on the credibility of the publishing organisation. These reports are uniformly rated with the symbols^{xx}, for example OECD (2010)^{xx}.

The categorisations in Table 6 emerged from this process.

Table 6. Overview of results of quality assessment

Elements	Rates as	No of Studies
Direct focus on intervention only	*	24
Direct focus plus appropriate methodology only	**a	19
Direct focus plus some evidence of effectiveness only	**b	10
Direct focus plus appropriate methodology plus some evidence of effectiveness	***	21
Compilation report comprehensive in terms of coverage of issues	xx	17
Overarching issues	Not rated	7

Most references to journal articles and reports in the following chapters are accompanied by one of these ratings. When this is not the case, it indicates that it has been used to provide useful background information. One point must be noted on quality assessment: some studies rated highly on the basis of these criteria are very small in scale. In these instances we considered the methodology was appropriate to the subject being studied. Nonetheless, with this in mind, care is needed in generalising the findings of small scale studies to other contexts. We note this point also where relevant in the data chapters.

One final point – this study is a review of the literature on interventions to support access, participation and progression of adults with disabilities to, in and beyond, education, training and rehabilitation programmes. It is not a review of practice. We are aware some good practice exists within the Irish context which has not yet been properly documented and thus could not be included in this review.

2 International and Irish Policy for Disability: An Overview

2.1 Introduction

This chapter examines international and Irish disability policy from the past two decades or so. The broad purpose here is to highlight existing legislative and policy frameworks and their relevance to education and training for people with disabilities and the extent to which they can facilitate or resource inclusive approaches. A more specific purpose is to inform policy development in Ireland by noting convergence and divergence between domestic policy and that of other jurisdictions where effective measures have been identified.

In line with the move to a social model of disability policy, developments reflect three key objectives: social inclusion, independent living and mainstreaming. The latter, specifically relevant to this review, means people with disabilities should not be catered for through segregated services but instead integrated into mainstream education and training provision. In the following section, we outline key international policy frameworks and developments, noting in particular their relevance to provision of education, training and rehabilitation services to adults with disabilities. We then look at policy in those jurisdictions from which literature has been included in this review: the USA, Canada, Australia, New Zealand and the UK. The final section discusses contemporary policy and provision in Ireland.

2.2 Key International Policy Developments

Since 1990, the main thrust of disability policy has been away from segregationist services towards supporting people with disabilities to live their lives independently in the community. This shift first emerged in 1993 with the UN adoption of the Standard Rules for the Equalization of Opportunity for People with Disabilities which highlighted the relationship between limitations experienced by people with disabilities and the environment's design and structure. Thirteen years later, in December 2006, the UN Convention on the Rights of Persons with Disabilities was adopted by the 8th General Assembly and came into force in May 2008. Its purpose is to: 'Promote, protect and ensure the full enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.'

The UN Convention builds on existing human rights treaties including the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights and it operates alongside the Standard Rules. It contains 50 articles on the human rights of people with disabilities and states' responsibilities for these. As a whole, the convention is important in the context of international policy developments, but two articles specifically relate to the themes of this review.

Article 24 obliges state parties to ensure that people with disabilities are not discriminated against in education. As for postsecondary education, the article states: 'State Parties shall ensure that persons with disabilities are able to access general

tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities' (UNCRPD, 2006).

Article 27 requires state parties to safeguard and promote the realisation of the right to work – this includes those who acquire a disability while employed. State parties must achieve this by taking appropriate steps, including through legislation, to ensure stated objectives including:

- enable persons with disabilities to have effective access to general technical and vocational guidance programmes, placement services and vocational and continuing training
- promote vocational and professional rehabilitation, job retention and return-towork programmes for persons with disabilities.

As of November 2012, 126 countries have ratified the convention including the UK, Australia, New Zealand and Canada. Both Ireland and the USA have signed up but not yet ratified it. In December 2010, it became the first UN human rights convention to be ratified by the EU itself.

Two other international developments within the convention's framework are worth noting. First, the UN has declared the objective of Education for All by 2015 as a Millennium Development Goal. This has led to the establishment of a 'flagship' to spearhead this global initiative, entitled The Right to Education for Persons with Disabilities: Towards Inclusion. Second, the International Labour Organisation (ILO) Convention on Vocational Rehabilitation and Employment also operates within the framework of the UN Convention. The ILO convention relates specifically and exclusively to people with disabilities and extends the principles of its UN counterpart into vocational rehabilitation for this group. The ILO convention may be ratified by countries, separate to ratification of the UN convention, and its provisions become binding. Among the jurisdictions examined here, only Ireland and Australia have ratified the convention.

A number of articles in the ILO convention outline national action to develop vocational rehabilitation and employment services for disabled persons. These relate to:

- providing appropriate and effective vocational guidance for people with disabilities
- evaluating vocational guidance, vocational training, placement, employment and other related services
- using existing services where possible with necessary adaptations
- developing provision for disabled persons in rural areas
- training and availability of rehabilitation counsellors and other suitably qualified staff responsible for the vocational guidance, vocational training, place and employment of disabled persons.

2.2.1 Disability policy in Europe

The objectives and direction of the UN Convention on the Rights of People with Disabilities are fully reflected in EU policy. Two key policy strategies are relevant here. The first is the Council of Europe Disability Action Plan (2006-15). This acknowledges the UN convention and gives effect to the Malaga Ministerial Declaration on People with Disabilities (2003) which stressed their 'progressing towards full participation as citizens'. The European Council's Action Plan recognises the need for a broad spectrum of public policy to support participation of this group and provides a reference point for policy makers in member-states during design, implementation and evaluation of disability policies and strategies. It comprises 15 action lines as follows:

Action Line 1: Participation in political and public life

Action Line 2: Participation in cultural life

Action Line 3: Information and communication

Action Line 4: Education

Action Line 5: Employment, vocational guidance, training

Action Line 6: Built environment

Action Line 7: Transport

Action Line 8: Community living

Action Line 9: Healthcare

Action Line 10: Rehabilitation

Action Line 11: Social protection

Action Line 12: Legal protection

Action Line 13: Protection against violence and abuse

Action Line 14: Research and development

Action Line 15: Awareness raising

Action Line 4 covers pre-school, primary, secondary, high school education and professional training, as well as lifelong learning. Among its objectives are:

- ensuring all persons, irrespective of the nature and degree of their impairment, have equal access to education, and develop their personality, talents, creativity and intellectual and physical abilities to their full potential
- ensuring disabled people can seek a place in mainstream education by encouraging relevant authorities to develop educational provision to meet the need of their disabled population
- supporting and promoting lifelong learning for disabled people of all ages and facilitating efficient and effective transitions between each phase of their education and between education and employment (Council of Europe Disability Action Plan, 2006: p16)

Action Line 5 aims to promote participation of people with disabilities in vocational assessment, guidance, training and employment-related services. Among the actions it identifies at member-state level is ensuring that the target group has access to an objective and individual assessment which:

- identifies options regarding potential occupations
- shifts the focus from assessing disabilities to assessing abilities and relating them to specific job requirements
- provides the basis for their programme of vocational training
- helps them find appropriate employment or re-employment.

It also notes the relevance of ensuring that people with disabilities have access to vocational guidance, training and employment-related services at the highest possible qualification level, and making reasonable adjustments where necessary (Council of Europe Disability Action Plan, 2006: p19).

Action Line 10 envisages a rehabilitation model similar to that noted in Chapter 1. Thus it states that a coherent policy for rehabilitation of people with disabilities should prevent the deterioration of disability, alleviate its consequences, further the autonomy of these people and ensure their economic independence and full integration into society. It also notes that comprehensive rehabilitation programmes should include a variety of complementary measures, provisions, services, and facilities that can considerably contribute to the physical and psychological independence of disabled people. The Council of Europe Disability Action Plan is paralleled by the Disability Strategy (2010-20) of the European Commission focuses on reinforcing member-states' work on disability policy. The objective of the commission's disability strategy is to empower people so that they can enjoy their full rights and benefit fully from participation in society and in the European economy. The strategy identifies EU actions to supplement national ones and determines mechanisms needed to implement the UN convention at EU level, including inside its institutions. The strategy identifies eight action areas which include the joint heading of education and training. Under this heading, the European Commission undertakes to:

- support the goal of inclusive, quality education and training under the Youth on the Move Initiative, which supports young people to work, study or train abroad
- increase knowledge on levels of education and opportunities for people with disabilities by facilitating participation in the Lifelong Learning Programme.

More generally, it notes that EU action will support national efforts through the strategic framework for European co-operation in education and training, to remove legal and organisational barriers for people with disabilities to general education and lifelong learning systems (EC 2010: p8).

2.3 International Policy Examples

Here we outline the most significant elements of current policy and provisions in the UK, USA, Canada, Australia and New Zealand. This is not a comprehensive account of policies

in these jurisdictions which relate to equality, disability and education and training. Instead we highlight key policy and legislation of concern to this review. It is clear, even from this brief overview, that substantial convergence exists across these jurisdictions. This is most evident in a rights based approach, measures to support inclusion in higher education and provision of vocational rehabilitation programmes.

2.3.1 United Kingdom

The UK has a devolved system of governance for education and training and there are differences and similarities between the education and training systems of Scotland, Northern Ireland, Wales and England. Within the UK, the rights based model is reflected in specific Government Acts which seek to improve opportunities for people with disabilities and promote their equal participation in every aspect of society. The principal legislation is the Equality Act (2010) which sought to standardise the provisions of earlier legislation such as the Disability Discrimination Act (1995/2005). The Equality Act promotes the rights of people with disabilities and prohibits discrimination based on disability in the same way as discrimination is prohibited on grounds such as race or gender. With minor exceptions, the Act prevails only in Great Britain, and as a result people with disabilities in Northern Ireland have a lower level of protection than do those in England, Scotland and Wales. In Northern Ireland, the Equality Commission plays a key role in overseeing equality and anti-discrimination law.

Specifically in education, a number of initiatives and strategies promote greater inclusion and participation. For example, the UK Roadmap to Disability Equality commits to closing the gap in participation in education between disabled and non-disabled people. It sets out how the UK government is working towards disability equality by 2025. It includes a variety of policies, some of which are applicable across the whole of the UK and some of which are specific to England only. In Northern Ireland, Scotland and Wales, the devolved administrations have a role in considering the most appropriate arrangements in their designated areas.

Specifically for access to education, transition services are in place in England and Wales and local authorities are charged with ensuring they are implemented at the appropriate time. Transition services are designed to assist students with disabilities to make satisfactory transitions to post-compulsory education outcomes. These outcomes may include transition to higher and further education, vocational training, employment or community provision. The Children Act (2004) established the role of directors of Children's Services and these have overall responsibility for transition in social care and education at local level, within the structures of the local authorities. In 2007, in response to the need for greater co-ordination of services for young people in transition, the Transition Support Programme was established to reinforce good practice and provide support to local areas.

The Disability Discrimination Act and the Disability Equality Duty firmly enshrined the rights of disabled people in post-compulsory education and both apply to the UK as a whole. The Act (1995) was amended in 2005 to include a public sector duty towards disabled people which, in the context of higher education institutions, requires academic staff to review their learning, teaching and assessment methods to ensure

they are inclusive for disabled students. The amended Act also established the Disability Equality Duty which requires public bodies, including higher education institutions, to comply with 'general duties' to promote equality of opportunity between disabled and non-disabled people and to eliminate discrimination. In addition to the general duties, they are also subject to specific ones, including the obligation to produce a three-yearly disability equality scheme, and to actively involve local disabled people, as well as disabled staff and students, in developing the scheme.

The Equality Act (2010) supersedes the Disability Discrimination Act and continues to require further and higher education institutions to make reasonable adjustments for staff, students and service users regarding their provisions, the physical infrastructure and auxiliary aids. Under this Act, reasonable adjustments are required where disabled staff, students or visitors personally experience substantial disadvantage in comparison with non-disabled people. The measure of a reasonable adjustment depends on the institution's circumstances regarding resources available; cost of the adjustment; practicality of the changes; potential benefit to other staff, students and visitors. There is also an anticipatory duty to provide reasonable adjustments for students, which means service providers must plan ahead and take a strategic approach to addressing the barriers that potentially impede disabled students.

Funding is available to students with disabilities through the Disabled Students Allowance which is based on individual need and is paid in addition to other mainstream financial supports for students.

The Equality Act is binding also on vocational training providers. In addition to mainstream provision, some vocational training programmes specifically target people with disabilities within the UK. For example, the Work Choice programme is designed to enable such people who experience difficulties in finding work to get and keep a job. The specific supports provided are based on individual needs, but can include: training and skill development; confidence building: interview coaching.

In relation to vocational rehabilitation, the Pathways to Work Programme, piloted in 2007 and rolled out nationally in 2008, provided a model of assisted return to employment for people with disabilities. It operated throughout the UK and targeted those receiving employment and support allowance or an incapacity benefit because of a health condition or disability. It was similar to vocational rehabilitation programmes operating in several countries, including those looked at here. Within this model, specific supports, including assessment, training and employment services, were offered on the basis of individual need and co-ordinated by a specially trained professional. In the UK context, this role was played by Employment Service Advisers. The Pathways to Work Programme ended in 2011 but evaluations indicated it increased the likelihood of a return to work by up to 7 percentage points.

2.3.2 USA

In the USA, the cornerstone of legislation relating to adults with disability is the American with Disabilities Act (2004). This extends a human rights approach to people with disabilities and, in particular, seeks to guarantee equal opportunity for all

individuals with disabilities and to empower them to achieve economic self-sufficiency, independent living, and inclusion and integration into all aspects of society. The Act protects disabled people against discrimination that may impede their ability to have the same rights and opportunities as non-disabled people. Its provisions extend to higher and further education as well as to vocational training.

In relation to compulsory age education, the Individual with Disabilities Education (IDEA) Act sets out the requirements on schools to support students with disabilities. The IDEA has been reauthorised a number of times, most recently in 2004. Among other provisions, the IDEA (2004) requires development and inclusion of transition planning in the individualised education plan (IEP) for every student with disabilities. The IEP must include measurable postsecondary goals and identify appropriate transition services as well as specifying the particular services the student needs in order to successfully transition into postsecondary opportunities such as college, vocational-technical programmes, or employment. Transition services at state level are supported by the Office of Special Education Programs (OSEP) of the Federal Department of Education which provides data and other supports to improve the transition and post-school outcomes of secondary school students with disabilities.

The Act stipulates that postsecondary institutions are responsible for providing necessary accommodations when a student declares a disability. Section II and Section III specifically state that postsecondary institutions are required by law to provide any reasonable accommodation that may be necessary for those persons with an identifiable disability to have equal access to the educational opportunities and services available to non-disabled peers. The Americans with Disabilities Act Handbook defines an accommodation as 'any change in the work environment [or instructional setting] or in the way things are customarily done that enables an individual with a disability to enjoy equal opportunities'. This may include providing or modifying equipment; making facilities accessible; and providing readers or interpreters.

The Higher Education Act, originally introduced in 1965, was intended to strengthen the educational resources of colleges and universities and to provide financial assistance for students in post secondary and higher education. The Act is regularly reauthorised to increase federal funding of universities, to create scholarships and to provide low-interest loans for students. Under its provisions, students with disabilities may be entitled to certain types of federal student aid. They may receive funding from the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant or the Federal Work-Study Program. At state level, the Office of Vocational Rehabilitation also may be willing to provide funding for education if an individual's vocational goal requires him/her to have some type of qualification.

Along with this Act, the Rehabilitation Act of 1973 also mandates equal access for persons with disabilities, including equal access to postsecondary vocational training. Other vocational education and training legislation, introduced under the Carl D. Perkins Acts, (1994, 1998) established mandates for equal access, and the delivery of high-quality programmes in vocational education for special population students, including those with disabilities.

The Rehabilitation Act Amendments (1973) is the most important legislation governing the provision of Vocational Rehabilitation in the United States. This is Federal legislation that governs and funds the provision of the Vocational Rehabilitation Programme. The programme is based on the principle that individuals with disabilities, including those with the most significant disabilities, are generally presumed to be capable of engaging in education and training. The fund is administered at state level by the Rehabilitation Services Administration and State Vocational Rehabilitation Agencies deliver the services to individuals. Vocational Rehabilitation services include assessment services, counselling and guidance, training, job-related services, rehabilitation technology, independent living and a variety of support services. Vocational rehabilitation programmes are custom-designed for each individual. The Workforce Investment Act 1998 (which supports co-ordination of training and labour market services for all job seekers) and the Ticket-to-Work programme (aimed at people with disabilities and which helps them avail of vocational rehabilitation or other interventions) are also relevant in vocational rehabilitation.

2.3.3 Canada

In Canada, people with disabilities are protected under the law by the Canadian Human Rights Act (1985) which prohibits discrimination on grounds of disability and guarantees equal benefit and protection before and under the law. The Office for Disability Issues, which operates at national level, is mandated to promote full inclusion and participation of persons with disabilities in all aspects of community and social life.

Responsibility for education is devolved to provincial and territorial governments and each such government establishes legislation and practice within its own jurisdiction. For transition services for example, the Child, Youth and Family Enhancement Act (2004) is key legislation in Alberta and provides for case workers to work with disabled youth and other professionals in preparing a transition to independence plan. Its objective is to help these young people successfully transition to adulthood. Implementation of the Act is supported by a cross-departmental working group, under the mandate of the Alberta Children and Youth Initiative (ACYI), which established a transition planning protocol for youth with disabilities in 2007.

At federal level in Canada, the duty to accommodate arises from two statutes: the Canadian Human Rights Act (1976-77) and the Employment Equity Act (1986). The duty to accommodate applies to employers, landlords, business owners, public service providers, educational institutions, professional associations, trade unions and others. It obliges these bodies to take steps to eliminate disadvantage to employees, prospective employees or clients resulting from a rule, practice or physical barrier that has or may have adversely affected individuals or groups protected under the Canadian Human Rights Act, or identified as a designated group under the Employment Equity Act. This legislation applies in the Provinces where it may be reinforced by local statutes and charters. For example the Ontario Human Rights Commission policy guidelines on disability and the duty to accommodate affirm the duty of education providers to be proactive on disability issues, and structure their programmes and policies so they are inclusive and accessible.

Financial supports, available from the federal government, include grants for students with permanent disabilities and grants for service and equipment. The federal government also operates a student loan programme for those on permanent disability benefit. In most provinces, local provision complements these supports. For example, Ontario has the bursary for students with disability and the accessibility fund for students with disability.

Along with legislation protecting the rights of disabled people, each province also implements special programmes to support the participation of people with disabilities in vocational training. In Alberta, the Income and Employment Supports Act (2004) legislates for the delivery of the Transitional Vocational Program. This provides postsecondary training for adults with mild developmental (intellectual) disabilities to help them prepare for work and independent living. Disability related employment supports also offer job search, workplace and educational supports (through postsecondary education, basic skill training, academic upgrading or labour market programmes). Federally-funded programmes also provide training for disabled young people.

Vocational rehabilitation programmes are also available in Canada. The Canada Pension Plan Disability Vocational Rehabilitation Programme offers vocational counselling, financial support for training, and job search services to recipients of disability benefits. This is under the framework of the Vocational Rehabilitation of Disabled Persons Act (1961). This Act is further reinforced at provincial level. For example, in Ontario the Vocational Rehabilitation Services Act (1997) states that any disabled person ordinarily resident in Ontario and eligible therefore as determined by the regulations may get vocational rehabilitation services.

2.3.4 Australia

At federal level within Australia, the Disability Discrimination Act (1992) is legislatively significant in that it promotes community acceptance of the principle that people with disabilities have the same fundamental rights as all members of the community. It seeks to ensure insofar as practicable that people with disabilities enjoy equality before the law.

In 2010, the government introduced a disability strategy advocating greater economic independence for people with disabilities. It outlines a 10-year framework to guide government activity across six key areas, including education. For education, the strategy's stated objective for people with disability is that they achieve their full potential by participating in an inclusive high quality education system that is responsive to their needs and that they have opportunities to continue learning throughout their lives.

The Act's provisions may be reinforced by the introduction of standards, within the framework of the Act itself. These can specify rights and responsibilities regarding equal access to opportunity for people with a disability, in more detail and with more certainty than Act itself provides. Standards can be made in several areas including employment and education. In education, the Act's education standards, which became

federal law in 2005, set out the obligations of education providers to assist students with disability. Their main aim is to give students with disability the right to participate in educational courses and programmes on the same basis as those without disability and they cover provision of reasonable adjustments to allow them to take part in education. These standards are binding on all educational providers including preschool and kindergartens, public and private schools and training institutes, universities and organisations that prepare or run training and education programmes.

The Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEEDYA) developed the career and transition services framework which provides programmes to support young people moving through and between school and post-school destinations. The most relevant of these is the National Disability Co-ordination Officer (NDCO) Programme which targets barriers that people with disability face in successfully accessing and completing post-school education and training and subsequent employment. A network of NDCOs works in 31 specific regions across Australia to improve co-ordination and delivery of support services to make it easier to enrol or participate in post-school education, training and employment. The programme's goals include increasing participation of students with disabilities in higher education, vocational training and employment and improving links between schools and other education and training providers.

Funding is available through the Australian Disability and Indigenous Peoples' Education Fund which offers students small learning support grants. Its priority is to sustain indigenous disabled students but it does so for non-indigenous as well.

In 2000, a national strategy to improve participation in vocational education and training was introduced. Called Bridging Pathways, it sought to increase participation levels among people with disabilities to that of the non-disabled population in order to ensure their integration into mainstream employment. In addition, Shaping Our Future — Australia's National Strategy for Vocational Education and Training 2004-2010 has as its overall goal the provision of equitable access to and outcomes from vocational education and training for disadvantaged groups including people with disabilities.

The Disability Services Act (1986), with its co-ordinated approach to assisting people with disability to get and keep jobs, provides a legislative and funding framework for a range of disability services, most significantly in employment. For vocational rehabilitation, CRS Australia, formerly known as the Commonwealth Rehabilitation Service, functions within the context of the Disabilities Services Act (1986) and is the primary provider of vocational rehabilitation services to Australian citizens. A range of services is available including education, training and employment support which are individually tailored. A case management model assesses and meets the individual's rehabilitation and employment needs.

2.3.5 New Zealand

The New Zealand Bill of Rights Act (1990) affirms the human rights and freedoms with special relevance to disabled people and affords them the same protections as any other citizen. The Human Rights Act (1993) also protects those with disabilities

from discrimination. In 2002 the Office for Disability Issues was set up and its work is underpinned by the New Zealand Disability Strategy, called Pathways to Inclusion.

Transition programmes are in place in New Zealand. The Youth Transition Scheme operates under the government's Vocational Services Transition Service and was set up to assist young people, primarily aged 15 to 17, to transition from school to further training, education and employment. The Ministry of Social Development also has funds for disability organisations and community service providers to deliver services to people with disabilities including transition from school programmes. The Tertiary Education Commission implements the Gateway programme which offers vocational pathways for students from school to the workplace.

The Human Rights Act (1993) recognises that ensuring equality for disabled people requires different treatment in certain circumstances so that they can participate in employment, education and access to goods and services. In line with this, the Tertiary Education Strategy requires that all third level education institutions ensure equity of access and opportunity and provide the support these students require to participate fully. Disabled students may apply for allowances to finance their study courses. Loans are also available and the government operates a grant scheme to which students with disabilities may apply.

The Public Health and Disability Act (2000) obliges the minister responsible for disabilities to develop a support service strategy to guide the government's overall direction of the disability sector in improving these services. In 2000-01 the New Zealand Disability Strategy incorporated a rights based model, Pathways to Inclusion. Its principal aim is to transform New Zealand from a disabling to a fully inclusive society, with progress benchmarked against the participation of people with disability in mainstream activity. Objective 3 of the strategy, covering education, seeks among other things to improve post-compulsory education options for disabled people, including promoting best practice, providing career guidance, increasing lifelong opportunities for learning and better aligning financial support with educational opportunities.

Pathways to Inclusion also set out a new direction for vocational services for people with disabilities. Objective 4, targeting employment of this group, also covers access to vocational training. It seeks to:

- enable the target group to lead development of their own training and employment goals, and to participate in developing support options to achieve those goals
- educate employers about the abilities of disabled people
- provide information on career options, ways to generate income, and assistance available
- investigate longer-term incentives to increase training, employment and development opportunities.

The Ministry of Social Development provides most funding for vocational services for disabled people. As noted, money is given to national disability organisations and to community service providers who use it for services such as consultative job placement and support, supported employment, day support services and life skills training.

New Zealand also has a vocational rehabilitation programme which is governed by the Accident Compensation Act (2001) and covers vocational rehabilitation services for those with disabilities. Its purpose is defined as helping a claimant to maintain or obtain employment or acquire vocational independence. The Act requires that these services are agreed by the Accident Compensation Corporation, specified in an individual rehabilitation plan. The corporation must be satisfied that the rehabilitation programme meets certain conditions including the likelihood of success, appropriateness, cost effectiveness and last for the minimum period necessary to realise its aim.

2.4 Disability Policy in Ireland

Disability policy in Ireland shares features of the previous policy frameworks – but with some significant differences. Although Ireland was one of the first countries to sign the UN Convention on the Rights of Persons with Disabilities, it has yet to ratify it. In effect, Ireland adopts 'common law' approach: ratification takes place only when all necessary legislation is in line with the convention. A considerable amount of disability legislation, however, has been enacted, triggered by the creation of the Commission on the Status of People with Disabilities in 1993. Its report, A Strategy for Equality, marked the modernisation of disability concepts and practice in the Irish context and made recommendations on the basis of three guiding principles: equity, maximising participation, and enabling independence and choice.

At a broad level, people with disabilities in Ireland are covered by the Equal Status Act (2000) which was amended by the Equality Act (2004) and, as amended, is entitled the Equal Status Act (2000-04). This relates mainly to service provision, including in education and prohibits discrimination on nine grounds, disability being one. Among the actions it outlaws are: direct discrimination; indirect discrimination; procurement of discrimination; harassment and victimisation. It also covers reasonable accommodation.

Section 7 of the Act prohibits discrimination at an 'educational establishment'. This term is held to include all educational establishments, private and public, from preschool facilities through to third level institutions. They are prohibited from directly and indirectly discriminating in: admission or the terms and conditions of admission; access to any course, facility or benefit provided; any other terms or condition of participation and expulsion of a student or any other sanction. Derogations specific to disability are specified. For example, difference in treatment where reasonably necessary is permitted should a person have a disability that could harm themselves or others. Similarly, if an educational establishment can demonstrate that not to discriminate would seriously affect or make impossible provision of services to other students, then this may be accepted. This derogation can be applied only on an individual basis and may not be used to exclude all students with a specific disability.

Under the Equal Status Act, if an educational establishment fails to do all that is reasonable to accommodate a student with a disability, this is considered to be discrimination. This accommodation can mean offering special treatment or facilities if, without it, the person would find it impossible or unduly difficult to avail of the service.

The educational establishment, however, will not have to provide that accommodation if it gives rise to more than a 'nominal cost'.

2.4.1 National Disability Strategy

The cornerstone of Ireland's disability policy is the National Disability Strategy launched by the Government in September 2004. At that time, the Government stated that it would build on the existing strong legislative and infrastructural framework for equality, add to that framework of new supports for people with disabilities and establish rights to assessments and services in the health and education sectors.

Key components of the strategy are:

- Disability Act (2005) which provides for independent statutory assessment of disability service needs, and the delivery of services to meet those needs, subject to availability of resources and services.
- The Education of Persons with Special Education Needs Act (2004), which provides
 for assessment of children's educational needs and the allocation of resources
 to meet those needs, with an emphasis on integrating children into mainstream
 education where appropriate.
- The Citizens Information Act (2007), which gives legislative responsibility to the
 Citizens Information Board to develop advocacy services for people with disabilities,
 particularly a personal advocacy service to deal with the most complex cases.
- The development of sectoral plans, which are statutory action plans relating to matters specified in the Act by six key Government departments.
- A multi-annual investment programme for disability support services. The National Development Plan (2007-13) committed €18.8 billion for disability services needs.
- The establishment of a centre for universal design.

More detail follows on each of these.

Disability Act, 2005

The Disability Act covers a statutory entitlement to:

- an independent assessment of health and education needs
- a statement of the services (Service Statement) it is proposed to provide
- pursue a complaint through an independent redress mechanism if there is a failure to supply these entitlements.

The Act also covers access to public buildings, services and information. On assessment, the Disability Act has a procedure for provision of service statements. An education provider or staff member of the Health Service Executive (HSE) completes these following an assessment. The statement should specify the educational need (or health need or both), the services to be made available to the individual and the timeframe within which they will be delivered. In education this will be the individualised education

plan. To date, the assessment provisions of the Disability Act have been implemented for those aged under five years, but not for those over this age.

The EPSEN Act, 2004

The Education of Persons with Special Educational Needs Act (EPSEN) focuses predominantly on child education (defined within the Act as those aged under 18) and introduces individualised education plans. Section 15 relates to the future education needs of students aged 18. It provides for a review of the student's IEP to assess the extent to which goals were met and identify the reasons for any failures. The Act also stipulates that the IEP should consider future provision to assist the child continue his/her education or training on becoming an adult. This section of the EPSEN Act is not yet in force.

Under the terms of the EPSEN Act, the National Council for Special Education (NCSE) was set up in 2005 to improve service delivery to persons with special educational needs arising from disabilities, with emphasis on children. The NCSE seeks to promote a continuum of inclusive and responsive educational provision which provides an appropriate education for children and adults with special educational needs. It provides supports to schools; advice to educators, parents and guardians; undertakes and disseminates research into special education; and provides policy advice to the Minister for Education and Skills on special education issues.

In 2006, the NCSE produced a set of guidelines on the individual education plan process to provide good practice guidelines for schools. These are intended to provide a standardised methodology when the relevant provisions of the 2004 Act have been commenced. Its remit also extends into adult provision. Among its functions specifically relevant to the education of adults with disabilities are:

- to ensure a continuum of special educational provision is available as required for each type of disability
- to review generally the provision made for adults with disabilities to avail of higher education and adult and continuing education, rehabilitation and training and to publish reports on the results of such reviews (which may include recommendations on how such provision could be improved)
- to advise all educational institutions on best practice for the education of adults with disabilities.

Citizens Information Act, 2007

The Citizens Information Act, among other things, states that the Citizens Information Board would employ personal advocates in a new service and that they should have a range of statutory powers. To date, this personal advocacy service has not been established. The Citizens Information Board, however, did set up the National Advocacy Service for People with Disabilities in 2011, on a non-statutory basis.

The establishment of sectoral plans

An important part of the Disability Strategy was the development of sectoral plans for six key Government departments. These were intended to ensure that access for people with disabilities would become an integral part of service planning and provision. The key Departments are Health and Children; Social Protection; Transport, Tourism and Sport; Environment, Heritage and Local Government; Communications, Energy and Natural Resources and the-then Department of Enterprise Trade and Employment.

The sectoral plan of the Department of Enterprise, Trade and Employment was introduced in October 2006 and set out targets and timetables for initiatives relevant to equality of training opportunities. The plan commits to enhancing the effectiveness of employment programmes and vocational training, including implementation of the FÁS Vocational Training Strategy, developed by FÁS. In outlining implementation of this strategy, the department's sectoral plan states that FÁS will closely monitor referral patterns, participation rates and successful completion of training courses by disabled people on a six-monthly basis with a view to assessing the need to develop better strategies and ensure that training better meets the needs of these learners. The plan states that such monitoring by FÁS was due to commence in 2007.

The sectoral plan contains the following objectives:

- development of a comprehensive employment strategy for people with disabilities
- further embedding of mainstreaming across services
- enhancing collaboration with key stakeholders and working with other key departments and statutory agencies
- monitoring and reviewing outcomes.

Under the disability strategy, the Department of Education and Skills (previously Education and Science) was not required to produce a sectoral plan. However, close links between the EPSEN Act, 2004 and the Disability Act, 2005 are reflected in the sectoral plan of the Minister for Health and Children. Both Acts require the HSE and the NCSE to co-operate in the delivery of education and health/support services for people with disabilities/special educational needs.

When the Disability Strategy was introduced, the parent department for national training agency FÁS was the Department of Enterprise, Trade and Employment (now the Department of Jobs, Enterprise and Innovation). Recent developments mean FÁS is being disbanded and training responsibility has moved to the Department of Education and Skills. As a result, it appears the provision of training is not covered by the sectoral plans.

Centre for excellence in universal design

Another plank of the disability strategy was the creation of a centre for excellence in universal design. Universal design was defined as 'the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or disability' (Disability Act, 2005).

This centre, located in the National Disability Authority (NDA), aims to promote a more inclusive environment that can be readily used, accessed and understood, without the need for further adaptation, by people of any age, size, ability or disability. The centre promotes universal design by developing new standards, collaborating with educational establishments on including such design in curricula and works with key stakeholders on the benefits of its approach.

Implementing the National Disability Strategy

The National Disability Strategy is co-ordinated by the Department of Justice and Equality. The National Disability Authority has a statutory role to assist the Minister for Justice and Equality in co-ordination, as well as to give relevant information and advice.

A high level implementation group, which drives execution of the strategy, acts as a forum under the leadership of the Justice Minister. Within this, Government officials and disability stakeholders can work together to guide development of a National Disability Strategy Implementation Plan and collaborate on its implementation including advising on resolution of difficulties. Specific objectives include:

- to bring the lived experience of people with disabilities to bear on strategic and cross-sectoral implementation issues
- to promote positive change in attitudes towards disability
- to support the Minister in reporting on the implementation plan as required to the Cabinet Committee on Social Policy.

The group meets quarterly and includes representatives of the Departments of Health; Social Protection; Transport, Tourism and Sport; Environment, Community and Local government; Jobs, Enterprise and Innovation; Communications, Energy and Natural Resources; Arts, Heritage and the Gaeltacht; Agriculture, Fisheries and Food; Education and Skills; Children and Youth Affairs and Public Expenditure and Reform.

2.4.2 Other statements and policies relating to education

In addition to the National Disability Strategy, other policies and strategies are relevant to the education and training of adults with disabilities.

National Office for Equity of Access to Higher Education

The National Office for Equity of Access to Higher Education has been established within the Higher Education Authority and its functions include:

- developing and implementing a national action plan to achieve equity of access to higher education
- managing funding programmes including the Fund for Students with Disabilities.

The National Plan for Equity of Access to Higher Education 2008-13 was drawn up by the national office above and the Department of Education and Skills (National Office for Equity of Access to Higher Education, HEA, 2008). The plan aims to increase equality of access to and participation in higher education by underrepresented groups

including those with disabilities. It commits to: progressing the lifelong learning agenda by developing a broader range of entry routes; expanding part-time and flexible courses; and measures to address the student support implications of lifelong learning. Specifically for people with disabilities, the plan aims to increase their participation rates in higher education by creating greater opportunities and supports. Its target is to double students with sensory, physical and multiple disabilities in higher education by 2013.

Key action points include:

- ensuring that all higher education institutions have a designated disability officer with responsibility for co-ordinating supports and accommodations
- ensuring reasonable accommodation, particularly for course materials and assessments and training all staff in inclusive teaching and institutional practice
- ensuring access to support for those who return or continue with education through part-time courses
- reviewing the Fund for Students with Disabilities, including the balance between individualised and institutional funding for disability support
- ensuring greater coherence in assessments and provision of supports across different levels of education.

FÁS strategy for vocational training of people with disabilities

In 2005 the national training agency FÁS produced a strategy on vocational training for people with disabilities. It emphasised five key themes:

- Mainstreaming
- Training programmes and delivery
- Training supports
- Facilities and redress
- Costs.

A key objective is to increase people with disabilities participating in FÁS mainstream training programmes. To that end, the strategy made many recommendations, most of which it suggested could be implemented within a one- or two-year timeframe.

The strategy acknowledged that a range of initiatives was required to achieve this. It commits FÁS to working with other stakeholders to improve take-up and envisages that targets for disabled persons' participation will be set in all training programmes. An annual budget will be allocated to pilot innovative and flexible means of training and to pilot design and delivery of new approaches for such training. The strategy also states that training and employment programmes will have an increased focus on progression to employment in the local labour market.

2.4.3 Broader Policies of Relevance to Disability Issues

In addition to disability specific policy, other strategies are relevant to the achievement of disability priorities and objectives.

Towards 2016: Ten-Year Social Partnership Agreement, 2005 – 15

The ten-year social partnership agreement, Towards 2016, addressed disability. It notes the challenges of integration and the creation of an inclusive society and sets long-term goals for people with disabilities:

- every person with a disability will have access to an income which is sufficient to sustain an acceptable standard of living
- every person with a disability would, in conformity with their needs and abilities, have access to appropriate care, health, education, employment and training, and social services
- every person with a disability would have access to public spaces, buildings,
 transport, information, advocacy and other public services and appropriate housing
- every person with a disability would be supported to enable them, as far as possible, to lead full and independent lives, to participate in work and in society and to maximise their potential (Towards 2016, 2005, p66).

National Action Plan for Social Inclusion 2007-16

The current National Action Plan for Social Inclusion runs until 2016 to complement the social partnership agreement. The high level goal it identifies relates to employment and participation and aims to promote equal opportunities for people with disabilities in the open labour market supported by enhanced vocational training, employment programmes and the further development of supports. The plan set a target to increase the employment of people with disabilities by ensuring that an additional 7,000 were employed by 2010. In the longer term it aims to raise the employment rate of people with disabilities from 37 per cent to 45 per cent and the overall participation rate in education, training and employment to 50 per cent by 2016.

Programme for Government

The Programme for Government 2011 includes a commitment to publish, following wide consultation, a realistic implementation plan for the National Disability Strategy, including sectoral plans with achievable timescales and targets within available resources. It also includes a commitment to 'ensure whole-of-government involvement and monitoring of the Strategy, in partnership with the disability sector'. The Minister of State at the Department of Health with responsibility for disability policy set up the National Disability Strategy Implementation Group in November 2011 to develop an implementation plan. Chaired by the Minister of State, this group includes representatives from the relevant Government departments, the main service providers, the local authorities and individual people with disabilities. The Programme for Government 2011 contains a commitment to 'ensure that the quality of life for people

with disabilities is enhanced and that resources allocated reach the people who need them'.

2.5 Education and Training Provision for Adults in Ireland

These policy statements and strategies set out ambitious targets for the inclusion of people with disabilities. In the following paragraphs we look at provision in Ireland for higher, further, continuing and adult education and vocational training and we note, where data allow, the extent to which people with disabilities actually avail of this provision. The data suggest significant challenges in achieving full inclusion of these people, particularly in vocational training.

2.5.1 Higher education

Higher education in Ireland is provided by seven universities, 14 institutes of technology, seven colleges of education and other State-aided and non-aided higher education institutions. These institutions provide courses to degree level, higher degrees as well as certificate and diploma courses. These latter are considered to constitute further education rather than higher education in a number of jurisdictions, and this corresponds also to the definition used in this review.

Grants are available through the Fund for Students with Disabilities. This is funded by the Government and part-funded by the European Social Fund under the Human Capital Investment Operational Programme 2007-13. It allocates grants to further and higher education colleges for services and supports to full-time students with disabilities. Those eligible can receive assistance from the fund from Post Leaving Certificate up to doctoral level. Types of supports and assistance for which funding can be sought fall into three broad categories: assistive technology equipment and software (for example. laptop, printer, Dictaphone, specialist software); personal and academic support (for example, personal assistant, note-taker, subject-specific tuition, learning support) and transport costs. It does not apply to those who are enrolled in part-time courses. In addition, access or foundation courses are not eligible for support under the fund.

Depending on the college and the resources available, a range of services and supports over and above those available under the Fund for Students with Disabilities may be available including:

- · disability service with dedicated disability support staff
- measures to enhance the accessibility of buildings
- non-standard admissions procedures
- tailored induction programmes for students with disabilities or students with specific categories of disabilities
- access to student accommodation units (on campus or otherwise) reserved specifically for those with disabilities
- psycho-educational assessment for students experiencing problems associated with specific learning difficulties/dyslexia

AHEAD (Association for Higher Education Access and Disability) Good Practice
Guidelines, published in 2008, provides a detailed guide to all forms of supports,
equipment and adaptation which may be available to students with disabilities
(AHEAD, 2008).

In the most recent year for which statistics are available (2011-12), 5.5 per cent of new entrants to higher education institutes indicated they had a disability. The overall rate of disability among students in this year was 6.1 per cent. The largest single category of disability was identified as 'specific learning difficulties' (46 per cent) while just 9 per cent were blind, deaf, or had severe vision or hearing impairment. Just over one third of those (35.7 per cent) who indicated a disability reported that they required additional support (HEA, 2013).

2.5.2 Further education

In many jurisdictions, further education (as defined here) is regarded as a progression route from secondary level which does not lead to the award of a degree or equivalent qualifications. This understanding informed the definition used here, as we discussed in Chapter 1 although our definition does not exclude adults accessing these forms of provision. In Ireland, further education is usually referred to as further education and training and this sector is considered to comprise those programmes detailed in Table 7. The programmes included here include provision availed of by both school leavers and adult returners such as Post Leaving Certificate courses (PLCs) which are increasingly availed of by those over the age of 20 and 30 (McIver, 2003); provision targeted exclusively at early school leavers (Youthreach); and programmes exclusively availed of by unemployed people (BTEI and VTOS). The Vocational Educational Committees (VECs) have a role in providing these programmes. (These bodies also provide second level programmes for adults, which fall under our definition of adult and continuing education.)

Table 7 also shows the most recent data on the percentage of participants with disabilities on some of these programmes. No data are available for access courses or for Youthreach. However, research into one rural Youthreach project in 2005 found 16 of the 35 participants had additional needs deriving from a range of learning, psychiatric and other disabilities (Gordon, 2005). Participation rates on both PLCs and the BTEI are extremely low at just 1 per cent or 2 per cent respectively. The Vocational Training Opportunities Scheme (VTOS), however, has a much higher rate of 14 per cent. It should also be noted that it is possible that these programmes may be catering for those with undisclosed or hidden disabilities, thus the actual level of participation may be higher than noted in Table 7.

Table 7. Further education programmes in Ireland and participation rates for people with disabilities

Programme	Target	Content	PWD as % of Total
Youthreach	Young people aged 15 to 20 who have left school without qualifications	Basic education, personal development, vocational training and work experience	Na
Vocational Training Opportunities Scheme (VTOS)	Over 21 and receiving disability related payment or unemployed > 6 months	Employment related skills as well as Junior and Leaving Certificate courses	14%
Post Leaving Certificate (PLC)	Young people who have completed Leaving Cert and adults returning to education	Vocational skills, general skills, educational courses work experience	1%
The Back to Education Initiative (BTEI)	Adults wishing to upgrade their skills	Education and vocational training	2%
Access courses	Adults wishing to enter higher education	Education programmes	Na

Source: NDA, 2004

Data on participation in some further education courses (and some forms of adult education) are limited due to difficulties with data gathering processes and particularly because individual institutions (particularly the VECs) have no shared system of data gathering.

2.5.3 Adult and continuing education

In Ireland, adult and continuing education is a broad and somewhat nebulous sector. Provision is delivered within and outside the formal education sector, and thus shares the characteristics noted by the ISCED (International Standard Classification of Education) referred to in Chapter 1. Some programmes may serve as a route into other forms of education and training but they may also have their own distinct aims. These include promoting social inclusion, fostering empowerment and contributing to civic society. As much of adult education provision is located in communities, many programmes have a community development dimension.

Such programmes may include second level courses offered to adults (including unemployed adults) as a form of second chance education, and these are frequently delivered by VECs. Two other important forms of adult education in Ireland are literacy, and community education programmes. The Adult Literacy Programme, funded by the VECs, funds basic education, including reading, writing and numeracy skills, and ICT (information communications technology) for adults who wish to improve their literacy and numeracy competencies to enhance their functional participation in personal, social and economic life.

VECs also support community education programmes in their local areas. These are usually delivered by community organisations and, as noted, employ a 'community development' model which seeks to respond to local needs. Participation by disabled students here is estimated at less than 1 per cent (NDA, 2004). Other such courses are provided through programmes such as the Community Development Programme, the Family Support Agency, the Equality for Women Measure and Pobal.

2.5.4 Vocational training

Vocational training is defined as 'supplementary to initial training which is part of an ongoing process designed to ensure that a person's knowledge and skills are related to the requirements of his/her job and are continuously updated' (CEDEFOP, Glossarium: Vocational Training, p63). Vocational training is delivered by private sector providers and within the public sector by FÁS, Failte Ireland and Teagasc. FÁS provides occupational training for the unemployed and re-entrants to the workforce through specific skills training and traineeships and training for those in employment through apprenticeships and in-company training.

People with disabilities are encouraged to avail of all mainline FÁS vocational training options. Under the Equality Acts it is the responsibility of FÁS and any of its contractors to provide 'reasonable accommodations' for learners with disabilities. The provision of technical aids or equipment is by arrangement with the manager of the relevant FÁS training service.

The most recent follow up survey of FÁS participants relates to those who left its programmes during summer 2010 (FÁS, 2012). The findings show that just 3 per cent of full time trainees have disabilities. Across programmes the lowest rates are in community training centres (zero per cent); special skills training (2 per cent) and traineeships (2 per cent). The highest rate, of 6 per cent, occurred in foundation training.

FÁS also contracts with special service providers to deliver training programmes specifically for people with disabilities. This is on the basis that some people will need extra supports and accommodations. Training is provided exclusively to people with disabilities within a segregated setting and courses include artlink, catering, desktop publishing and graphic design. The participant follow-up survey referred to previously found that among those who left this training in 2010, just 9 per cent were in employment at the time of the 2011 survey. The report notes that this was the lowest rate of progression in 17 years (FÁS, 2012).

One recent development in vocational training is worth noting, although it is a shortterm measure and not a permanent initiative. This is the Disability Activation Project (DACT) which is jointly funded by the European Social Fund and the Department of Social Protection. Targeted at the Borders, Midlands and Western regions, it has four strands:

- Strand 1: Improving Access to Employment
- Strand 2: Progression Programmes for Young People
- Strand 3: Support for Progression and Retention of People with an Acquired Disability

Strand 4: Innovative Employer Initiatives

Activities under DACT began in October 2012. Programmes will be delivered by community and other organisations to improve services to young people with disabilities.

2.5.5 Vocational rehabilitation

Vocational rehabilitation is a term widely used but most usually without definition. As a result, it varies widely across national jurisdictions. In many countries, however, a case management approach is taken to the delivery of co-ordinated services tailormade to individual need. All countries looked at in this review have such programmes in place, linked to welfare entitlements and frequently targeted at those with acquired disabilities. More recently they have come to be considered under the term disability management (WHO, 2012).

This specific model of vocational rehabilitation is not in place in Ireland, although certain elements of it are provided through the National Learning Network. More generally, rehabilitative training programmes are the responsibility of the Department of Health/ HSE and have as their objective the transmission of social rather than vocational skills. 'Rehabilitative training programmes are designed to equip participants with the basic personal, social and work related skills that will enable them to progress to greater levels of independence and integration in the community' (http://www.nda.ie/website/nda/cntmgmtnew.nsf/0/091BDD567113418180257B050032020C/\$File/autism_paper. htm). The HSE's policy document (New Directions, 2012) envisages further changes in its role vis-a-vis rehabilitation training most significantly in the transfer of responsibility for supported and sheltered employment to the Department of Jobs and Enterprise.

2.6 Conclusion

The above overview of disability policy in Ireland and elsewhere, although necessarily brief, indicates the principal directions and trends in disability policy internationally. Within the framework of international conventions and strategies, national jurisdictions are increasingly implementing a rights based approach to disability, incorporating both broad equality measures to outlaw discrimination and specific enabling measures to actively promote inclusion. The latter are particularly prevalent in access to and participation in higher education. Policy on adult or continuing education is scarce: other than the extent to which service providers in this sector are covered by anti-discrimination legislation. Given the important role which adult and continuing education has been shown to play in promoting social inclusion and providing a stepping stone to other forms of education and training, this is a significant gap.

Irish policy shares many of the features of the international examples looked at here. The commitment to independent living and mainstreaming, the existence of broadly focused equality legislation incorporating disability, the establishment of specific legislative and policy instruments and strategies to promote equality of participation in education and training all echo the international situation. Delays in rolling out some elements of the legislation have been significant, however, which at this point means the provisions of

Irish disability policy are not fully implemented. One issue here is particularly notable. This relates to the provision of transition services to young disabled people coming to the end of their second level education. Although legislation is in place in Ireland for these services, it has not yet been implemented. Such policy and provision is well developed internationally and a considerable body of practice and learning has been developed. (This is looked at in some detail in Chapter 3).

There are also provisions within the international context which do not exist in Ireland. Notable here is legislation and policy governing the provision of vocational rehabilitation programmes, particularly in the context of acquired disabilities. Again, such policies are commonplace elsewhere and it appears the trend in Europe is towards a greater emphasis on facilitating the retention in, or timely return to, employment on the part of those with acquired disabilities. As this category predominates among those with disabilities at any given time, such policies would appear to be of particular relevance.

A very significant issue in this context is the current and ongoing reform of the Irish further education and training sector. There are three main elements to this. First, the VECs have been reduced in number and were re-established as 16 Education and Training Boards on July 1, 2013. Second, FÁS is being disbanded and its services divided between the Department of Social Protection and the new ETBs. Finally, a new further education and training authority, called SOLAS, is in the process of being established to oversee funding and policy direction for the sector. The new system and structures will not be fully operational until 2014. These developments represent major reforms of the Irish further education and vocational training sectors and are likely also to affect provision of adult and continuing education programmes. The scope for these new infrastructural and system arrangements to promote inclusive practice and provision is discussed in Chapter 7.

3 What Works in Facilitating Access to Higher, Further, Continuing and Adult Education, Vocational Training and Vocational Rehabilitation for People with Disabilities

3.1 Introduction

In this chapter we review the literature on supports and measures which seek to facilitate people with disabilities to access higher education, further education, adult and continuing education, vocational training and vocational rehabilitation. The conceptual framework discussed in Chapter 1 identified the following forms of provision on access.

Table 8. Examples of measures to facilitate access to education and training

Stage in Student Journey	Measures at the Level of the Student	Measures at the Level of the Institution	Indicators
Access	Outreach strategies	Transition programmes	Enrolments
	Information provision	Differentiated assessments	Type of courses
	Personal transition plans	Differentiated matriculation	accessed
	Guidance and advice	processes	Level of courses
		Universal design in education	accessed
		Remission of fees	

We must note here, however, that we found no relevant literature on financial support for or remission of fees. Consequently, the literature examined relates to the other measures outlined in Table 8 including transition services to prepare students with disabilities for entry to institutions of higher or further education, which receive a great deal of attention in the literature. This is particularly so in the US, where federal funding for studies of transition services ensures academic and research interest. Measures to support access to adult and continuing education or vocational training are far less frequently referred to in the literature and, rather than a deficiency in the literature, this appears to reflect the actual pattern of provision.

Given this imbalance – along with literature limitations noted in Chapter 1 – our approach in this chapter is to:

- provide a wide-ranging overview of the literature in general
- focus more specifically on the primary concerns and interventions evident therein
- highlight specific interventions (or types of interventions) where evidence of effectiveness exists and which have particular relevance in the Irish context.

The discussion here distinguishes between measures aimed at school leavers and those aimed at other categories of participants. Thus in the first section we look at studies and reports relating to transition supports for young people leaving second level schools. In subsequent sections of this chapter, we examine the measures put in place by institutes of higher and further education to facilitate access by students with

disabilities. These measures include outreach strategies, differentiated matriculation processes, and alternative pathways to higher and further education. We also look at the limited literature on interventions to facilitate adults with disabilities to access adult or continuing education and interventions to facilitate access to vocational training and vocational rehabilitation.

Although it is not current practice, many elements of the interventions aimed at school leavers could be extended into the arena of promoting access for adults including access to adult and continuing education and vocational training. Thus the implications for both policy and practice are more generic and therefore more extensive than at first appears.

3.2 Transition Services to Support School Leavers to Progress to Higher and Further Education

Measures to support the transition of young people with disabilities from second level to higher or further education are widespread and receive much attention in the literature. In many jurisdictions, transition services are legislated for and compulsory, as evident from the discussion in Chapter 2, and in Ireland too legislation is in place regarding transition planning although this has not yet been implemented. On the basis of the material examined below, three principal strategies can be identified, although in practice, there can be considerable overlap between them. These strategies are:

- Student planning or transition planning. This refers to a set of practices to develop individual plans for students to support their transition to positive post-school outcomes.
- Student development or transition education. This refers to specific education or training inputs to enable students to drive their own transition plan and prepare them to self-advocate as college students. Self-determination skills are a major part of this.
- Transition programmes. This includes a diverse set of practices (and usually includes
 elements of transition planning and transition education) the objective of which is
 to prepare young people with disabilities to secure positive outcomes, including but
 not exclusively, a transfer to higher or further education.

Before examining these transition services, it is worth noting a number of problems that exist within this literature. First, a considerable amount of the literature on transition services offers scant information on the method of delivering the interventions and frequently, no detailed information on outcomes. Second, where data on outcomes are provided, studies do not differentiate clearly between progress to degree courses at university level or to part-time short term courses in colleges of further education. This is particularly a problem in the US context, where most of the transition literature comes from. There, as we noted earlier, higher education is considered to include community colleges which offer part-time and short-term courses which do not lead to degrees. There is evidence that a high number of students entering community colleges drop out. Bailey *et al* (2005) note that for students who enrolled in a community college as their first postsecondary enrolment in the 1995-96 academic year, only 36 per cent had completed either a certificate, associate, or bachelor's degree within six years.

Thus in the US, data on progression to higher education for students with disabilities needs to be viewed carefully. More generally, several commentators note that there is little information on how effective the various transition approaches and strategies are (Forbes *et al*, 2001; King *et al*, 2005*). However, given the international prevalence of transition services, the level of research attention they receive, and the fact that Irish policy is now moving in this direction, in the following paragraphs we review the literature on transition services and we highlight the factors associated with positive outcomes. We draw particular attention to the role of self-determination training which has been identified as an effective element of transition services, contributing to successful and sustained outcomes.

3.2.1 Transition planning

Transition planning can be considered an aspect of individual education planning (IEPs) and in line with that the concept of transition is coming to be seen as a process rather than an event (Halpern (1994) cited in King et al, 2005)*. In this context, the transition plan can be seen as part of or forming a continuum with individualised education plans. In the US literature for example, no distinction is made between transition planning and IEPs which are a formal requirement for second level students. However, the EADSNE has argued that while transition planning is closely related to individual education planning, it is a different tool and can be considered as a kind of individual portrait of a young person's situation, motivation, wishes and ability (EADSNE, 2006: p22)*. Transition planning is provided to young people still in school (although the actual intervention may take place outside the school setting) and is therefore outside the remit of this review. However, due to its relevance as a strategy to facilitate access and its potential to be replicated in other settings, we look briefly at its key elements here.

Despite some differences across national contexts, transition planning has a number of common elements. First, and somewhat obviously, there is the development of the plan itself which takes the form of a written statement of desired outcomes for the student and the services needed to achieve these. For example, the US Federal Government has developed a pro-forma template for documenting transition plans which collects information on:

- measurable postsecondary goals
- courses of study required to achieve these goals
- strategies and activities required to progress to these courses of study
- transition services required to implement these strategies.

Second, transition plans are most usually developed through a series of meetings which commence at different stages in different national contexts although in general, they begin when the student is aged around 14. The involvement of the young person and their families is central in these planning meetings: in the US, the IDEA (2004) requires that the student be an active participant in the transition process and their participation is required at all transition meetings. In the UK, the Special Education Needs and Disability Order (2005) prescribes that transition goals are defined in consultation with all stakeholders including the young person and carers.

Third, interagency co-operation is frequently a feature of student transition planning. In the US, transition meetings involve in addition to the student and his or her family, the teacher, the local education support agency and members from various adult services agencies. In the UK, the transition meeting, initiated by the local authorities, may involve:

- a representative from social services
- local doctor or community nurse
- teacher(s)
- a representative from the Connexions Service
- an educational psychologist
- parents or carers
- anyone else who the student wishes to nominate.

In some instances, a specific transition service co-ordinator or transition specialist may also play a role in facilitating development of transition plans and in identifying the services necessary to implement them. Such a role is referred to as effective in some of the literature (for example, Larragy, 2004***, Nuehring & Sitlington, 2003**b) but little detail is provided on how it is discharged.

3.2.2 Student development/self-determination

An element of transition services which receives particularly favourable attention in the literature is student development, particularly training in self-determination skills. King et al (2006)*** in their review of literature on transition strategies in Canada suggest: 'Because transition education/planning services are largely psychosocial in nature, it may be the case that the most effective means to bring about desired change are through the uses of strategies reflecting a contextual model – one that stresses the person-environment level of intervention and the notions of self-efficacy, empowerment and self-determination' (p213). Self-determination may be defined as 'a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, and autonomous behavior' (Izzo et al, 2011: p3)*. The emergence of self-determination within policy and practice is summarized by Shaddock (2000) as moving from a situation where there was `planning for' to 'planning with' to 'planning by' people with a disability (cited in Larragy, 2004)***.

Although self-determination training occurs in a number of jurisdictions, it receives most research attention in the United States, where it was legislated for in the Rehabilitation Act of 1992 and 1998 and in the IDEA of 1990 and 1997. There is no single model of self-determination training; it can be delivered in a number of ways and may be embedded in broader programmes of transition or as a stand alone intervention. The following overview of the key elements of self-determination training is summarised from Wood *et al* (2004)*:

 Choice-making skills: These enable students to identify interests and preferences and to appropriately select an option based on those preferences and interests.

- Problem-solving skills: These are focused on helping students to identify and define a problem and to generate potential solutions.
- Decision-making skills: These involve helping students to use problem-solving skills.
- Goal setting and attainment skills: These are focused on enabling students to define
 and articulate a goal, identify current status in relation to the goal, develop an
 action plan, and evaluate progress toward achieving the goal.
- Self-regulation skills: These enable students to solve problems or employ selfmanagement strategies.
- Self-advocacy: This is based on knowledge of basic rights and responsibilities, how to use self-advocacy skills and how to be effective team members.
- Self-awareness or self-knowledge: This enables students to identify common psychological and physical needs of people, recognize differences among people, and understand how one's actions influence others.
- Self-efficacy: Self-efficacy is not usually taught directly, but it may be enhanced through repeated successful experiences in applying the skills/components listed above. (Wood et al 2004)*.

Some studies have shown that self-determination is an important component of transition for students with disabilities preparing for post secondary education. Larragy (2004)*** in a finely analysed study of seven Australian transition programmes also highlighted the importance of self-determination. She writes: 'This inclusive approach provided more opportunities for self-determination than had previously existed, and resulted in increased employment and participation in community activities, which were preferred outcomes' (Larragy 2004: p528)***. Trainor (2008)* in a paper linking the concept of self-determination to that of social capital also noted the effectiveness of self-determination in the transition process for students with disabilities while Skinner and Lindstrom (2003) in advocating for self-determination training argue that individuals should increase self-awareness of their disabilities, including their strengths, weaknesses, and compensatory strategies necessary for success, as they are often unaware of the potential impact of their abilities on their future careers. Specifically for students with intellectual disabilities, it has been shown that knowledge of disability and postsecondary support services and the ability to self-advocate are effective contributors to successful transitions to college (Milson & Hartley, 2005, cited in Cawthon 2010)*.

3.2.3 Transition programmes

In practice, student planning and development are frequently accompanied by (and sometimes embedded within) transition programmes. These can be considered as a wider set of services or interventions to enable the young person prepare more effectively for progression to higher or further education and training. In some jurisdictions, notably the US and the UK, it appears that transition programmes are rather narrowly focused on progression to higher and further education – indeed they have been criticised for prioritising these outcomes over the wishes of the students,

particularly those with intellectual disabilities (Kaehne හ Beyer, 2009** a; Heslop *et al* 2002)** a.

Numerous examples of transition programmes display many different features, although typically, the literature on these provides little detail. The following examples (reported on in Larragy 2004)*** are from Australia where student transition services are targeted on a wide range of potential outcomes including employment, community participation and community living as well as higher education and training.

- In New South Wales the Post-School Options programme caters for all types of
 disabilities and aims to promote community access and employment. It is delivered
 by NGOs and provides intensive support for participants although a lack of resources
 limits the extent to which it achieves this. An evaluation found three-quarters of the
 1,300 participants reported being more involved in community actions and over half
 reported being more independent as a result of the programme but only 8 per cent
 found employment and most wanted more vocational skills.
- In Queensland, the South Coast Transition Model provided a co-ordinator to work
 in five schools with 51 students with mainly intellectual disabilities. The objective
 was to promote independence and enable participants to access training or
 employment. The programme lasted two years and included advocacy, advice
 and information. The curriculum was strongly employment oriented with links to
 employment agencies. It succeeded in placing 65 per cent of participants in full-time
 work.
- Also in Queensland, the Moving Ahead programme offered a two-year intervention
 for 400 students with severe disabilities with the objective of enabling them access
 education and vocational programmes leading to employment. Data on final
 outcomes were not reported but the programme was considered to have increased
 social skills and self-confidence although Larragy cites no detailed data on this.
- In Victoria, the Futures for Young Adults programme catered for 3,250 students with all types of disabilities over five year. It aimed to enhance access to employment as well as community services. A transition worker facilitated planning and ongoing access to various services. Overall 16 per cent of participants progressed to higher or further education.

In Box 1, we present an overview of a transition programme in the US which incorporated transition planning and self-determination training and which focused on progression to higher education. This is based on research by Rothman *et al* (2008)**^b who conducted a survey of 129 participants in the transition programme. The survey suggested interesting results but had a low response rate of just 21 per cent (27 respondents).

Box 1: Road to Success (Albany, New York)

Background: Road to Success is a short-term transition programme incorporating elements of self-determination delivered in Albany, New York. Introduced in 1987, it was exclusively for students with visual impairments. Twelve years later it was expanded to include students with learning and

physical disabilities and in 2003 was recognised as a model transition programme in New York State.

Objective: The primary goals of the Road to Success are twofold: first that students acquire the skills necessary to succeed during their first-year of college and after completing college; and second that they become more independent and assertive.

Content: The programme incorporates activities to enhance transition for students with disabilities. Participants attend a one-week residential programme and participate in workshops led by 'successful professionals' who also have disabilities. Workshop topics include: independent living; advocacy skills; study skills; disabled student services; transition skills; college systems; assertiveness training; reasonable accommodations; teen sexuality.

Outcomes: A survey of participants during 1999-2006 found 21 of the 27 surveyed were in college or had attended college since participating in Road to Success. Most of those who were or had been in college believed it had had a positive impact on their success in college. They indicated that they had acquired most skills in self-advocacy, disability rights, orientation and mobility on campus and social networking. They also believed the skills acquired would prepare them for career success, particularly self-advocacy, social skills, knowledge of their rights, technological resources, access to social network and job-seeking strategies.

Source: Rothman et al, (2008) **b.

3.2.4 Factors associated with successful transition services

The consequential delivery of student planning and development within transition programmes means much of the available evidence on effectiveness relates to overall transition services rather than to specific interventions (King et al, 2005)*. This makes it difficult, if not impossible, to assess the relative merits of one programme over another — even in those limited cases where outcomes data are provided. Thus in the examples cited above, it is not possible to highlight one as being the most effective or most appropriate for replication. In this context, many studies do not attempt to assess the effectiveness of particular programmes. Instead they identify factors across transition services which are associated with positive outcomes. As noted above, self-determination training is one such factor; and its effectiveness lies in how it equips students with disabilities to direct their own transition planning. Other effective elements identified within the literature as supporting positive outcomes are:

Student and family involvement

The importance of including the young person and their family in decision-making and planning is frequently referenced as contributing to effective transition (Larragy, 2004***, King et al, 2006***, Cobb and Alwell 2009***). Landmark et al (2010)*** in their literature review on transition strategies in the US conclude: 'Best practice research

in transition has consistently shown that student and parent active involvement in the transition process is critical for students with disabilities to achieve promising post-school outcomes in such areas as employment, independent living, and postsecondary education participation' (Landmark *et al*, 2010: p172)***. For students with intellectual disabilities, some studies suggest that the more involved they are in planning, the less likely they are to encounter subsequent difficulties (Janiga & Costenbader, 2002 cited in Cawthon *et al*, 2010)*. Self-determination as discussed above is obviously an important factor in ensuring effective student participation.

Adequate information

For families and students to participate effectively in planning, however, they must also have access to good quality information (Larragy, 2004***, Vickerman and Blundell, 2010**a). Writing in the UK context, Madriaga (2007)**a identified a lack of information to support students with dyslexia in making choices about their futures, particularly in gaining information on pursuing higher education, as a significant barrier to progression. He writes: '... without information to make informed choices, disabled students not only experienced stress and anxiety but also difficulty in preparing themselves for higher education' (Madriaga, 2007: p409)**a. The author suggested that this is a reason for the low proportion of disabled students in further and higher education within the UK at present. In the Irish context O'Brien et al (2011)**a who researched transition for students with intellectual disabilities and Gillen and Coughlan (2010)*, who interviewed a small but unspecified number of parents of children with mild intellectual disabilities, also noted the lack of information on the part of parents regarding transition planning for their children. In Australia, Larragy (2004)*** also notes that consumers of services, including transition services, are often ill-equipped to participate effectively in planning without adequate information.

Transition specialists

A number of studies cite the importance of the role of staff, particularly transition specialists, in ensuring effective transition strategies (Larragy, 2004***, Nuehring & Sitlington, 2003**b). Larragy writes: 'The quality of the relationship between staff and the student and their family/carers was considered critical. Personalised services where workers have manageable caseloads were strongly recommended along with regular reviews of service plans' (Larragy, 2004: p526)***. The development of a well-paid, qualified, well-prepared, direct support workforce with appropriate workloads was also identified by Winn and Hey (2009)* in their review of literature on the barriers and challenges faced by disabled students in accessing higher education in Australia. Few studies, however, provide detail on the actual role of transition specialists.

The availability of, and close links with, a wide range of service options and collaborative working have also been identified although there is less consensus in the literature on their effectiveness. Larragy (2004)*** and Heslop et al (2002)*** are positive in relation to interagency working. However, a number of writers have also suggested there is little evidence of the effectiveness of this method. For example, Kaehne and Beyer (2009)*** surveyed professionals in the UK working with an interagency approach to support

students with learning disabilities. They found the professionals placed considerable emphasis on soft outcomes and interagency processes over concrete outcomes such as post-school placements. Similarly, in their review of transition literature Test *et al* (2009)* found that collaboration among schools, the community, and relevant agencies was the least substantiated transition practice in the literature. Likewise, Cobb and Alwell (2009)*** in their meta-synthesis analysis of 31 articles on transition services found no supporting evidence for interagency collaboration.

Despite any doubt about their effectiveness, transition services are by now well established in legislation and policy in many jurisdictions. The literature also suggests, however, that legislation alone is no guarantee of effective or even adequate implementation. In the US, research has indicated limited involvement in transition planning meetings on the part of students with disabilities and that their active participation is difficult to achieve (Mason et al 2004)*. That study also found only a third of 523 transition planning team members surveyed reported satisfaction with the level of student involvement in planning meetings (ibid). In the UK, two recent studies have also identified problems with transition services particularly for students with learning disabilities. Abbott and Heslop (2009)* interviewed 14 young people with learning disabilities in the UK, their parents and professionals working with them and focused on the barriers these young people faced in transition from school. They describe what they call a 'gloomy picture' in relation to young people with learning difficulties in residential special schools and colleges: 'There are patchy and inconsistent approaches to the mechanisms of transition planning, despite the fact that there is guidance and legislation that clearly set out duties and responsibilities' (Abbott & Heslop, 2009: p53)*.

These reports highlight that legislation alone is insufficient to ensure effective practice, and the need for careful monitoring of transition programmes and their outcomes. However, monitoring outcomes is particularly weak in the literature. Some writers cite the increase in the proportion of students with disabilities progressing to higher or further education as evidence of the impact of transition planning. In the US, for example, the number of students self-reporting with a disability increased from 6 per cent in 1995-96 to 11.3 per cent in 2003-94 (Katsiyannis *et al* 2009)*. In Ireland, however, where transition planning is not in place (although it may take place informally), a similar increase was experienced albeit from a much smaller base (ANED, 2010)^{xx}. It is also important to bear in mind that data on students with disabilities are based on self-reporting (OECD, 2010a)^{xx}.

Transition programmes are particularly recommended for students with intellectual disabilities, but some research evidence suggests transition services do not always adequately equip them for the move to higher or further education settings. One study (Janiga & Costenbader, 2002, cited in Cawthon 2010)* found college administrators were not satisfied with the transition programmes offered to students with learning disabilities, believing that they experienced these problems:

- they lacked self-advocacy skills
- they did not understand the difference between high school and college in class size, instructional time, teaching and examination methods

- they didn't understand their own strength and weaknesses and the specific accommodations they needed
- they could not function without relying on parents or special education teachers
- disability assessments lacked adequate documentation for specific accommodations
 (Janinca & Costenbader, 2002 cited in Cawthon et al 2010: p114)*

Moreover, as noted, some research has suggested that for young people with intellectual disabilities, transition planning outcomes tend to be a transition to further education, when the wishes of the young person lie elsewhere (Kaehne & Beyer, 2009**a; Heslop et al 2002)**a. A similar picture was indicated by O'Brien et al (2011)**a in the Irish context.

3.3 Interventions of Institutes of Higher and Further Education to Facilitate Access by Students with Disability

In the previous section we examined literature on measures to support access to higher and further education that are located outside the institutes of higher or further education themselves, although in some cases they may be involved in these measures. In this section, we focus on measures these institutions implement to reach out to or otherwise facilitate access by students with disabilities, regardless of their prior status (that is whether they are progressing directly from school or as mature students). Recalling the conceptual framework outlined in Chapter 1, the relevant interventions here relate to universal design and disability specific approaches.

The extent to which institutes of higher and further education actively attract students with disability or implement actions to facilitate their access is difficult to gauge from the literature, although a cursory glance at websites suggests it is a widespread practice (Centre for Disability Studies and School of Sociology in the University of Leeds: CDS, 2009)**a. Thus, it appears these practices receive little research attention and appear to have been the subject of no evaluation. What is apparent, though is that the two main interventions by institutes are:

- using accessible websites to provide information to underpin outreach
- making changes to admissions procedures.

It is interesting to note that the former can be seen as an aspect of a universal design approach while the latter is disability specific and can be seen as an aspect of inclusive design. This highlights an issue frequently referred to in the literature: balancing system-wide interventions such as universal design with measures to meet the needs of students with disabilities (Tinklin *et al*, 2000**a; CDS, 2009**a). Universal design has been defined as 'the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design' (Mace *et al*, 1996, cited in Burgstahler, 2012, p.1) and is generally characterised by seven principles:

- equitable use
- flexibility in use

- simple and intuitive use
- perceptible information
- tolerance for error
- low physical effort
- size and space for approach and use.

We should also note here that the broader issue of universal design regarding physical infrastructure, building design and so on receives less attention in the literature (CDS, 2009)**a, although these may be expected to have a substantial impact on access. Burgstahler (2012) notes that UD can be applied to physical spaces so they are welcoming, comfortable, accessible, attractive and functional. Specific considerations should be made for climate, entrances and routes of travel, furniture and fixtures, information resources and technology and safety (Burgstahler 2012, p2). CDS (2009)**a (Centre for Disability Studies) in its review of innovation among institutes of higher education in England and Wales suggests that improving physical access has become regularised to the extent it seems not worth citing as a distinctive focus of innovation and good practice. That study also identified technological changes which can complement alterations in physical design and the authors considered this indicated a move towards the 'smart campus'. Thus sites and buildings could increasingly incorporate a range of electronic and mechanical devices and aids enabling people to navigate and pass through spaces more swiftly and freely, providing immediately accessible information, adjusting environments to meet needs of individual users, and alerting students to potential barriers (CDS, 2009)**a.

It provides an example called React which has been developed to allow students with visual impairments to find their way around a university independently, based on a system of speakers located on certain buildings which are triggered by a device the student carries. Development of the 'smart campus' is likely to be the object of ongoing innovation but at this point remains embryonic.

3.3.1 Web-based outreach strategies

In recent years awareness has increased on the potential importance of websites in promoting information on and access to education courses and in underpinning outreach. As noted above, however, these approaches received little attention in the literature. In general, the limited studies available on the subject tend not to identify specific instances in which this has led to enhanced progression to education but instead focus on the accessibility per se of the websites. For example, Thompson *et al* (2010)***^a investigated the websites of 127 higher education institutions in the US during 2004-05. They found doctoral and masters programmes tended to have more accessible home pages while smaller institutions, such as theological colleges or art schools, tended to have the least accessible home pages. Somewhat unexpectedly, that same study found the disciplines of science, technology, engineering and math (STEM) tended to have fewer accessible departmental home pages. Four years later, a follow-up study identified significant improvements in accessibility particularly in technologically less complex areas such as alternative text for images and skip navigation links. However, accessibility

declined in other areas. It is impossible to generalise from these findings, but they do highlight the need for careful monitoring of the adequacy of websites as accessible information sources. CDS (2009)***a make a similar point based on their research into disability supports and good practice in institutes of higher and further education in England and Wales.

Cebula and McGregor (2009)* in describing the implementation of an intervention to promote accessibility in a school of education in the UK (the Teachability Project) described website use to promote college open days. It was recognised that open days would be valuable for students with disabilities as they provided an opportunity for them to assess the college's physical environment. Open days themselves, however, presented problems of access. To address this, a 'virtual open day, was created on the website with relevant information. The virtual open day also benefited international students and others who could not attend on the day itself.

An interesting example of a web-based approach to outreach is provided by the Trinity College Dublin Pathway Initiative. This has three focuses: phase one focuses on transition to third level; phase two on retention in third level; and phase three on progress to employment. The transition phase is supported by the Pathways website with the following elements:

- pre-entry contact between service providers in college, incoming students, parents and schools
- positive role models in the form of student 'stories' and realistic advice on specific courses and expectations
- advice and guidance to ensure successful student progress through the first year of college.

Doyle et al (2011)**b have reported on the findings of a mixed-methods study of the Pathways Initiative. They focused on the 'web-based strategy to facilitate transition planning for second level students, parents and practitioners as stakeholders in the transition process.' (Doyle et al, 2011: p10)**b. Their study collected data via surveys embedded within the website. Only 26 students and six parents completed surveys but the results suggest that while parents and guidance councillors were cited as the most frequent sources of advice by prospective students with disabilities (16 per cent in each case), college websites also emerged as a significant source, with 12 per cent of respondents citing these as the most frequent for advice. The authors conclude: 'This suggests that providing a dedicated college web resource that targets all stakeholders in the transition process, is a viable strategy for providing access to transition information' Doyle et al, 2011)**b.

The Centre for Disability Studies and School of Sociology in the University of Leeds undertook an extensive review of self-identified good practice in institutes of higher and further education in England and Wales (CDS 2009)**a. This comprehensive study brought much valuable information together based on surveys in the two countries. It did not define good practice, however, and allowed the institutes to self-identify what they considered it to be. The authors identified the following features of effective website based outreach:

- a specific location for disability services information, well linked to main pages
- within this disability information, coverage related to key topics and issues
- links to the DES and/or disability statement
- accessibility maps or similar guides
- good contact details within specific parts of the site (ideally including connections to student organisations as well as university resources, units and their staff)
- detailed information on the provision and characteristics of residential accommodation (with appropriate contact details)
- financial/funding information. (CDS, 2009: p139)***

3.3.2 Differentiated admissions procedures

Accessible information and websites can be seen as an element of universal design but one area where a more disability specific approach is warranted relates to admission procedures and mechanisms. Yet, surprisingly few studies refer to modifications to admissions policies and procedures as a mechanism to facilitate access by students with disabilities. One study in the UK (Davis, 2008)**a noted the flexibility afforded to small and specialised colleges which recruit students directly and not through the national centralised system. The colleges looked at were exclusively arts providers (music, performing arts or visual arts) and the study identified these elements of good practice for admissions procedures:

- policies and procedures are in place to ensure that applications from disabled people are dealt with fairly and without discrimination
- such procedures and policies must be understood and systematically applied by all staff involved in admission and selection processes to avoid ad hoc and potentially discriminatory decisions
- information needs to be transmitted to disabled applicants so they know clearly what they need to do and how they can be supported to demonstrate their potential during the selection process
- application forms must provide an opportunity for applicants to say they are disabled and to say something about the adjustments they require on-course and for selection activities
- the form must state clearly that this information is sought to meet their needs during the selection and admissions process (that is for audition and/or interview) and during their course of study
- it should make clear how the information will be protected (Davis, 2008: p9)**a.

The report notes examples from the specialised colleges. For instance, in a conservatoire for dance and drama, disabled candidates are invited to discuss and agree accommodations with the disability support officer. With the candidate's permission a set of written recommendations is passed on to the admissions tutor so they are aware of the candidate's name, date of interview or audition and the accommodations

required. A procedural flow chart for the admission of disabled students has been developed which sets out a sequence of steps within which the roles of the disability support officer, the registry and the admissions tutors are clearly described. Guidance notes and staff training support the flow chart. The admissions officer is responsible for setting up audition/interview adjustments for disabled candidates and has a simple tracking spreadsheet to facilitate this. It includes monitoring information on how appropriate the adjustments were in meeting the candidate's needs (Davis, 2008)***a.

The practice of interviewing students with disabilities as part of the admissions process was also referenced by Vickerman and Blundell (2010)***a in their survey of 506 students in the UK (of whom 5.6 per cent had a disability). It examined their satisfaction with supports and highlighted the fact that students with disabilities who were interviewed as part of their application process to higher education, considered it to be a positive factor. Thus, the authors note that while interviewing can be daunting for some, the opportunity for the student to visit the university and discuss their needs as part of the decision-making process could be positive for staff and students alike (ibid).

In the Irish context a recent initiative to simplify applications to higher education has received favourable levels of usage.. This is the Initiative known as DARE (Disability Access Route to Education). DARE was introduced in 2009 and involves universities and institutes.

Its key elements are:

- varying disability criteria across the institutions was replaced by uniform criteria set by external expert panels
- the Accesscollege.ie website, Twitter, Facebook and YouTube sites were launched
- information is provided at student information events and application advice clinics are run nationwide every january offering one-to-one sessions in the run up to the february 1st deadline
- DARE gives a points reduction to students with disabilities thus increasing their chances of securing a place in third level
- the scheme offers a package of supports including academic, personal, financial and social supports
- each college has access and disability officers to support students during applications and continue to offer guidance and support throughout the student's college life.

Since its inception, eligible applicants to DARE increased from 701 in 2009 to 1,279 in 2011 while acceptances rose from 214 in 2009 to 753 in 2011. It is not clear if this is a real increase in the number of students with disabilities entering higher education, but it does indicate that they find this mechanism useful when seeking admittance to third level.

3.4 Alternative Pathways to Higher and Further Education

The extensive literature search produced a few studies which looked at alternative pathways for people with disabilities to enable them to progress to higher or further education. This form of provision can be considered an outreach strategy as it frequently forges links to community organisations or is delivered within community settings. From the literature that is there, quite a bit of variation exists across countries. In general though, and in comparison to the situation for school leavers, there is little literature on measures to support adults with disabilities to access education or training and again this appears to reflect limited practice rather than a deficiency in the literature. A New Zealand study of the range of postsecondary programmes available to adults with an intellectual disability internationally highlighted this and other issues (Mirfin-Vetch, 2003)*. It noted that postsecondary education initiatives and programmes for students with an intellectual disability are most commonly incorporated within transition from school initiatives. The author suggested that this indicates that adults wishing to access tertiary education later in life (after the transition years) may experience difficulty (Mirfin-Vetch, 2003)*.

In Ireland, students with disabilities may avail of mainstream Post-Leaving Certificate (PLC) courses delivered throughout the country. Described as an important and valuable sector, these offer second chance education and lifelong learning (ESRI, 2006)**a. However, in its review of the PLC sector, the Economic and Social Research Institute found that for most students, they are not a route to higher education, but rather an alternative form of education and training. Nonetheless, its data show that participants with disabilities were more likely than those without to access higher education (rather than employment) at the end of their courses. No further information is available from that report on students with disabilities participating in PLCs. Philips and Clarke (2010)**a, in their finely analysed case-studies of six students with disabilities, also suggest that PLCs can facilitate disabled students to progress to third level.

Also in Ireland, access courses have become an increasingly commonplace pathway to higher education. While some cater for school leavers, most are targeted at adults. An evaluation of such courses in 2009 (Murphy, 2009)**a analysed data from five universities, two colleges of education and ten institutes of technology across the country. Between them, these were delivering 37 access courses, of which 15 specifically targeted individuals with disabilities (Murphy, 2009)**a. The overall results of participation on access courses were found to be favourable, with 62 per cent of those who completed them entering higher education. No separate information is provided, however, on participation, completion or outcomes for students with disabilities. An earlier study by Shevlin et al (2004)* who interviewed 16 students and six career guidance teachers and focused mainly on the experiences of accessing higher education, noted that 'gaining entry to college through informal alternative access routes is a very complex procedure as regulations and requirements can vary both between and within higher education institutes' (Shevlin et al 2004: p40)*. They also note: 'This research strongly suggests that the current arrangements relating to access to higher education are grossly inadequate for young people with disabilities' (ibid: p51).

3.5 Supporting Access to Adult and Continuing Education

The literature examined in the preceding sections relates to measures to support access to higher and further education. In this section we turn our attention to interventions to support access to adult or continuing education. However, based on this review, we have to conclude that almost no literature is available on measures to attract or facilitate adults with disabilities into this provision. Indeed the disjuncture between the field of disability studies and that of adult education is remarked upon in the literature. Clark (2006) has argued that the discipline of adult education has not made the same connections to disability studies as it has to race, gender and ethnicity studies. Given the importance of adult education programmes in providing social and health benefits as well as in acting as a pathway to vocational training, this is regrettable.

Provision that can be considered adult education (which can also cater for school leavers) is that which is directed at facilitating adults with intellectual disabilities to enter university or other higher and further education settings. A feature of it is that students do not necessarily achieve a degree or certificate. Rather, their work is assessed and accredited according to their own level of achievement, an element which corresponds with many adult education models. In practice many initiatives based on this model put little emphasis on accreditation and instead present students with portfolios of completed work and certificates of achievement (Noonan, 2012)*. Again, in this respect, it is similar to adult education models. It has been extensively used in Canada (where the State of Alberta played a pioneering role) and in the US, but is now being adopted internationally, including in Ireland.

Hart *et al* (2006) identified three different models of this type of provision (summarised in Noonan, 2012 p109):

- The substantially separate model: programmes are staffed by special education teachers and housed separately within the college. Students only take part in classes with other students with disabilities.
- The mixed programme/hybrid model: students with intellectual disabilities may take part in regular college courses with the general student body but follow a separate curriculum with other intellectually disabled students. They may participate in social activities with their non-intellectually disabled peers.
- The inclusive individual support model: students participate in regular college courses along with the general student population. They are not part of a specially designed programme and there is no programme base on campus. Services are driven by the student's vision and career goals and no limitations are imposed so they have access to a range of college and social activities.

The latter, inclusive individual support model, is viewed as best meeting the requirements of the UN Declaration on the Rights of People with Disabilities (Noonan, 2012)*. In fact, the literature features debate on special provision within institutes of higher and further education with some writers warning that special programmes and classes risk increasing rather than decreasing the marginalisation of students with intellectual disabilities (Weir 2004). The inclusive model usually relies on general students to act as volunteer mentors and has implications also for staff who may have

to reconsider their own teaching styles. Some international examples of this type of approach are noted below.

Panitch (1988)*** describes an early Canadian initiative of this sort for adults with intellectual disabilities, many of whom came from the sheltered workshop environment. The two-year programme called Community Integration through Co-operative Education (CICE) is implemented at Humber College. Nine students are accepted every year (18 at any given time) and those involved in CICE are free to access the range of opportunities that the college has to offer: courses; guest lectures; work placements; and intra-mural sports. After an orientation period the CICE students are encouraged to choose an area of vocational interest or 'major'. Activities related to their major are accompanied by tutoring in literacy and practical math. Participants are tutored by peer tutors who are students from human service courses on fieldwork placement with CICE. As well as providing academic support placement students fulfil a critical role of opening up a wider social network to the CICE students. The author contends that several factors illustrate the programme's success. First, CICE applications far exceed available placements. Second, the attrition rate is virtually nil. And third, 76 per cent of CICE graduates are working either full- or part time in their chosen field within a few months of graduating (Panitch, 1988).***

The approach Panitch described continues to be implemented in Canada and has been adapted by many universities there. On average up to 50 participants are involved in these programmes annually. Research indicates that this is a successful model for young adults with intellectual disabilities. For example, about 70 to 80 per cent of students on these types of programmes get jobs, compared to about 30 to 40 per cent for people who do not participate in higher education (Uditsky & Hughson, 2007)**b. Positive factors that contributed to these outcomes were identified as facilitator support, learning adaptations, instructor involvement and the role of other students (Hughson *et al*, 2006).

The Canadian model replicated in Finland (where it was called Kampus) had more mixed results, however, suggesting the challenges in achieving inclusion. Salovitta (2000)*** describes a pilot project where adults with a mild to severe intellectual disability participated as 'guest students' in mainstream education in postsecondary environments including vocational schools, institutes and university faculties. The project functioned for five years from 1995-2000 and included just 15 students. They were individually placed in regular educational institutions in accordance with their own choices. Decisions on future studies were made using person-centred planning techniques. Volunteers among the non-disabled students supported the Kampus students in class. IEPs were written for all students at the project's outset. According to Salovitta, participants were received with a mixture of attitudes from non-disabled students. Those with a mild intellectual disability were more readily accepted as regular class members than those with a moderate or severe intellectual disability who were only tolerated or superficially accepted. As a result, Kampus participants experienced help, but not friendship, from non-disabled peers. Insufficient support from disability professionals was given as the reason for discontinuing the programme.

A particular barrier for adults with learning disabilities in participating in adult education programmes derives from literacy issues and the lack of appropriate training materials (Mirfin-Vetch, 2003)*. This was addressed in the EU context by the Pathways to Adult Education for Intellectually Disabled People project, an Initiative funded under the EU Lifelong Learning Programme. According to Pathways: 'For people with intellectual disabilities, lifelong learning is not only about learning new skills or vocational training: it is about being included in society, being able to represent themselves and to take more control of their daily lives and their future. For this reason, and because they require ongoing retraining of skills due to their learning disability, adult education is especially important for this group of disabled adult learners' (Pathways, 2008). Pathways sought to address literacy by (a) establishing European easy-to-read standards for adult education and e-learning material and (b) building on the standards to make lifelong learning programmes more accessible for adults with intellectual disabilities by developing user-friendly instruments and toolkit for staff and trainers. The initiative involved the participation of people with intellectual disabilities in all aspects including developing all project material and activities and in evaluating the outcome. Similarly, the Irish National Adult Literacy Association (NALA) recently implemented an initiative with the STEP project run by St John of God's. It conducted a 'literacy audit' of the communications, policies and procedures of the STEP project, provided training and development for staff along with literacy development for the project's intellectually disabled clients.

One study exploing adult education for those with physical as well as intellectual disabilities is the Communities Outreach Initiative in Ontario, Canada. It investigated the views of 250 adults with a variety of disabilities on what they needed to enable them to participate in adult education. This initiative was reported on in McLean *et al* (2008)*. Focus group participants identified these supports which they considered necessary to facilitate their access to (and participation in) education:

- viable funding programmes recognising specific needs and circumstances of adult learners with disabilities
- accessible transportation; increased emphasis placed on physical accessibility in learning institutions throughout all buildings
- accessible/alternative training and testing materials to accommodate persons with disabilities
- emphasis placed on creating peer support programming and services
- more disability awareness training in public schools and within the academic community.

Some of these are similar to those in place in higher education institutes (as discussed in Chapter 4) and indicate the potential for the transfer of learning and practice across the various educational and training sectors. This is particularly worth noting in the context of adult education where, based on Irish data, participation by adults with disabilities appears extremely low. The reference to peer support programmes is also of interest and an issue we will return to.

3.6 Interventions to Support Access to Vocational Training

In this section, we turn our attention to interventions to support access to vocational training. As noted in Chapter 1, we found a limited number of studies which investigated 'what works' in vocational training for adults with disabilities. We should note here, however, that in some contexts, transition services for school leavers can act as a pathway to vocational training as well as to higher education. Thus the studies examined earlier on transition to higher education are relevant also to transition to vocational training for school leavers.

Some studies do report on pathway provision specifically to vocational training, particularly for students with intellectual disabilities. Many, however, report unsatisfactory outcomes. Winn and Hey (2009)* undertook a selective review of literature on the barriers to transition, including to vocational training in the Australian context. They argued supporting progression to vocational training 'is often just an add on, within a model of poorly supervised work experience or work shadowing that is not explicitly linked to the needs of the student's skills enhancement or long-term learning goals' (Winn & Hey, 2009: p107)*. Likewise, Wright (2006)* presents a critical discussion of outcomes for young people with intellectual disabilities in the UK who were participating on segregated courses intended to link them into further mainstream provision. She argues that 'provision for students with severe learning difficulties in general colleges of further education is unfocused, at best circuitous and at worst, leads individuals back into dependence, unemployment and social segregation' (Wright, 2006)*.

A somewhat similar picture is provided by Gebhardt *et al* (2011)***a based on an extensive review of national databases relating to the outcomes for students with learning disabilities in Germany. The students had attended special (segregated) schools and on leaving were legally entitled to training schemes. However, increased competition for places in Germany's vocational training system has made it difficult for students with disabilities to be accepted and only 5 to 10 per cent of special school graduates find their way into an apprenticeship immediately after leaving school. An alternative for them is to participate in state funded prevocational and vocational training schemes intended to serve as a route into apprenticeship training. Gebhardt and his colleagues, however, found few of those attending prevocational programmes made the transition into apprenticeship programmes (Gebhardt *et al* 2011)***a

The studies cited above all suggest that segregated provision is ineffective in ensuring positive outcomes in access to vocational training. A study of transition from special education into post-school services for young adults with intellectual disability in Ireland, Gillan and Coughlan (2010)*, offers additional insights. They interviewed a small (unspecified) number of parents of young adults (aged 19 to 24) with mild intellectual disabilities and examined their engagement with adult services at the point of transition. The study found that the lack of facility to be involved with transition planning or with adult services emerged as a significant source of stress. On the other hand, key supportive factors in the service system endorsed by most parents included adequately organised work experience placements, and open, regular communication with teachers and staff in adult services. (Gillan & Coughlan, 2010)*. More generally, the barriers

identified to effective transitions to adult service settings highlighted a disconnect between educational and adult services. They included:

- lack of information on available options
- lack of 'real' alternatives to the specialist vocational training provider
- waiting lists for available services
- lack of person-centred practices in vocational training service
- lack of co-ordination between child and adult services
- lack of parent involvement in decisions and planning
- problematic interactions with staff in adult services.
- vocational training staff 'not listening' to parents (Gillan & Coughlan, 2010: p200)*.

Another Irish example also highlights the need for co-ordination of services and for an approach that ensures all elements of provision are adequate. As noted in Chapter 2, the national training authority (FÁS) contracts special training providers for vocational training specifically for people with disabilities. A review of this provision (WRC, 2006)**a found these training providers succeed in attracting people with disabilities to their services and the following were identified as facilitating that: local visibility; trust within the community of people with disabilities; and a history of tailored supports. The report also notes that special training providers are typically the first to be approached by the individuals seeking a place which they usually offer before referring the client to FÁS. This means special training providers are effectively fulfilling a function of the national employment services which may not engage with the disabled client in the same manner as other clients. Consequently, they may not be considered for mainstream courses that may be more appropriate for them (ibid).

The two studies noted above highlight the importance of adequate services at the point of entry to a training programme. At this stage such services not only ensure that access can be achieved by people with disabilities, but also help to underpin successful outcomes and progression to employment. Hillier et al (2007)*** report in detail on a vocational support programme for young adults on the autism spectrum in the US. The study included all nine participants on the programme – a small number which warrants caution in extrapolating from the results. The study does, however, indicate positive outcomes and highlights the important role that supports for access, participation and progression played in its success. The study followed participants through two years of the programme and identified the role of pre-recruitment services in its success. Prior to receiving services, each participant completed a specially designed enrolment process. An information pack sent to each potential participant contained a detailed questionnaire assessing skill levels in daily living, communication, cognitive, behavioural and social skills. This was completed by parents. Participants themselves completed a questionnaire providing demographic and background information, including the name of their high schools, dates of graduation, and grades achieved. They also detailed any previous work experience. Subsequently, each participant and his or her parents attended an enrolment interview with programme staff, where more specific details on his or her strengths and challenges were gathered. Questions on employment

interests were asked and later examined for the participant's level of job readiness. The programme enjoyed high success rates (discussed in Chapter 5).

As we noted in Chapter 2, disability policy, national and international, advocates a mainstreaming approach such that the target group should be included in mainstream provision rather than being catered for separately. But there appear to be few examples of how this is to be achieved in practice. An exception here is a major initiative to increase the participation of people with disabilities in vocational training which was implemented in Australia from 2000 to 2005. Called the Bridging Pathways Strategy, it involved collaboration between the national training authority, and a wide range of national and regional agencies including public providers and disability organisations. Its goal was fourfold with the first objective relating to access. The goal of 'Opening the Door' had two sub-aims: to improve pathways to vocational education and training; and to provide accessible information (Bridging Pathways, 2000)^{xx}.

On the first goal – improving pathways – the objectives are to:

- develop links between schools, prevocational initiatives and disability employment assistance services to improve access, support and placement to appropriate training and workplace opportunities
- promote and skill training providers on recognition of prior learning and reasonable adjustment options
- provide improved career guidance arrangements that allow people with a disability to make informed choices.

On the second goal – providing accessible information – the planned activities are to:

- equip relevant personnel with advice and strategies to ensure they provide information that is accessible for people with a disability
- develop and disseminate information about vocational education and training options in accessible formats
- identify and promote existing subsidies, incentives and services.

An example of a project to promote access was the Web accessibility project. This aimed to help people with disabilities access information on vocational training courses and support by ensuring that relevant websites complied with the web design standards of the Disability Discrimination Act 1992. A more comprehensive project was Study Access which scoped the feasibility of creating a national one-stop shop website for vocational training and related study information. The outcomes of the Australian strategy are difficult to determine. For example, participants with a disability in vocational training programmes almost doubled from 53,475 in 1998 to 91,439 in 2003 (Cavallaro *et al*, 2005, cited in Winn & Hay, 2009)*. The main reason for this was attributed to the more co-ordinated effort to enhance access and participation rates for individuals with a disability, through the national Bridging Pathways Strategy, along with better methods of recording and identifying these individuals (Winn & Hey 2009)*. However, between 2003 and 2006 the participation rate had risen from 6.4 per to just 7.2 per cent, still far below equity with the general population (Bagshaw *et al*, 2008: p4)*.

Lewis et al (2011a***; 2011b)*** offer interesting examples of measures to support transition to mainstream vocational training. These detailed studies were conducted over a period of time, mostly overlapping with the Bridging Pathways timeframe, and record the implementation and impact of three initiatives to support young people with disabilities into apprenticeships and traineeships in Western Australia.

One of these is the Western Australia Apprentice Project, outlined in Box 2 which sought to increase the number of disabled people availing of apprenticeships and traineeships in Australia. In Chapter 6, we outline a case study of this project along with two follow-up initiatives.

Box 2: Western Australia Apprentice Project

Background: Apprenticeships and traineeships had been identified as positive employment pathways for people with disability, giving them equal employment outcomes with participants without disabilities (Lewis *et al*, 2011b, p108).

Model: The model involved a multi-agency approach between the agency contracted to provide disability employment services (EDGE Employment Solutions) and the group training organisations (GTO) which employ apprentices in training and place them with employers. As EDGE had no experience in providing the type of vocational training for apprenticeships, and the GTOs had no expertise in recruiting or supporting apprentices and trainees with a disability, this partnership was seen to be mutually beneficial.

Actions: Multiple approaches were used to attract people with various types of disability who would be interested in undertaking an apprenticeship. In addition to reviewing its register of 150 job seekers for potential candidates, EDGE ran newspaper advertisements seeking new candidates. The first received more than 100 responses and subsequent ads were scaled back. None was placed during the project's second year, as referrals at this stage were being made from various sources, including VET teaching institutions and other DES service providers.

Seventy persons with disability registered with the pilot project. Among these, 28 were placed in apprenticeships and five were placed in traineeships during the two-year project. The project ended before the remaining 47 registrants were placed. Those who did not commence an apprenticeship or traineeship within the two-year period of the Australian Apprenticeship Western Project were later helped to find an apprenticeship, traineeship or entry-level job with ongoing support from EDGE.

Outcomes: Placement strategies were similar to those utilised generically by EDGE to secure award-paying jobs in open employment for people with disability:

 eleven placements were secured by responding to advertised vacancies for apprentices and trainees

- six through employer canvassing (where employers were approached without a vacancy having been advertised)
- six through repeat business (where employers were already employing people with disabilities through EDGE)
- five through the contacts of the GTO partners
- three through VET education providers
- two through the informational networks of the registrants.

Source: Lewis *et al*, (2011b)***.

3.7 Interventions to Support Access to Vocational Rehabilitation

Finally and briefly, we examine the literature on interventions to support access to vocational rehabilitation. As noted in Chapter 1, our definition of the term follows international practice (see also Chapter 2): vocational rehabilitation refers to individualised provision embedded in a case management approach which aims to restore function and enable the client to get a job. This provision is frequently targeted at those with acquired disabilities and has recently been termed 'disability management' by the World Health Organisation (WHO 2011)^{XX}. Vocational rehabilitation has been defined as a process 'whereby those disadvantaged by illness or disability can be enabled to access, maintain or return to employment, or other useful occupation (cited in Chamberlain *et al* 2009)***. In jurisdictions where this model is practised, vocational rehabilitation services tend to be multifaceted and client centred. They will usually begin with an evaluation of the person's impairments, functional abilities, their fitness for work and an assessment of their work and workplace. They will then go on to identify the desired outcome or outcomes and finally the assessment culminates in an individualised goal direct rehabilitation plan which is agreed with the worker.

This model of vocational rehabilitation is usually intrinsically linked to welfare status and state support and in many jurisdictions a version of this model is now mandatory in order to receive such support. As noted in Chapter 2, the USA, Canada, UK, Australia and New Zealand have such programmes in place. They are widespread in other parts of Europe too with some variation. For example, in Germany, the onus is on the employer to draw up a disability management plan which has to be done when the employee is absent from work for more than six weeks, otherwise the employee will not be eligible for benefits. In the Netherlands, the Work and Income According to Labour Capacity Act also requires that the person is assessed before benefits are given. In Sweden, employers are responsible for part of vocational rehabilitation, such as testing working capacity, work training, transfer to another post, changes in work tasks or working hours.

The route into vocational rehabilitation therefore is generally directed by state welfare policy but requires effective co-ordination between welfare provision, training providers and community supports. In most countries, the general practitioner doctor also has a role. The GP usually issues sickness certificates which are a required part of assessing eligibility. According to Chamberlain *et al* (2009)*** GPs need to be aware

that the person's best chance to return to work is by early intervention through prompt rehabilitation. It is also necessary, in order to plan vocational rehabilitation effectively, to differentiate between static disabilities where the individual may have predictable difficulties in the workplace, and progressive conditions where the response may have to be more flexible and allow for variation from day to day (ibid: p858). However, it has been asserted that many GPs have little training in vocational rehabilitation (Elliott & Leung, 2004)***.

3.8 Discussion

In this chapter we have reviewed the literature on interventions to support access to higher, further, adult and continuing education, vocational training and vocational rehabilitation. The overall picture is one of a large number of interventions being implemented, mostly for school leavers, with some imbalance in the manner and extent to which these are documented and evaluated within the literature. In particular we noted that the major focus within the literature is on the transition of school leavers to higher or further education (the latter defined as non-degree courses within third level institutes). Far less information exists on what works for alternative or adult routes to higher and further education, although the efficacy of good web-based outreach strategies was identified. In addition, there is almost a complete lack of literature on access by disabled adults to adult or continuing education. This may reflect the absence of such provision, or alternatively that it has not been the subject of published studies. In vocational training, despite international calls for the inclusion of people with disabilities in mainstream provision rather than in segregated training programmes, few examples of good practice are documented.

However the literature review did highlight evidence of effective practice in some of areas. Table 9 summarises the programmes and approaches which, on the basis of the literature reviewed, were found to be effective.

Table 9. Examples of effective interventions in supporting access

Sector	Intervention	Evidence Base	Key Factors Associated with Success	Relevant Texts	
Higher and further education	Transition services	Critical mass* US Canada Australia	Young person and family involved Self -determination training Good information Transition specialist	Larragy, 2010*** Landmark <i>et al</i> , 2010 *** Rothman <i>et al</i> , 2008 ** ^b	
Higher and further education	Differentiated application process	Several interventions UK Ireland	Outreach Good information Simplified application process	Davis, 2008** a Doyle, 2011** ^b	
Adult and continuing education	Inclusive education in university settings	Critical mass* Canada	Adult pedagogy Mentors	Panitch, 1988*** Uditsky & Hughson, 2007**b Hughson <i>et al,</i> 2006**b	
Vocational training	Inclusive apprenticeship training	Single intervention Australia	Outreach to participants Role for disability organisations Direct approach to employers	Lewis <i>et al</i> , 2011a*** Lewis <i>et al</i> , 2011b***	

^{*}Sources cited are indicative of critical mass of literature in this area

Transition services to help school leavers progress to positive post school outcomes, including higher education feature in all the jurisdictions examined in Chapter 2. In these countries, transition services are devolved to local level but are supported and resourced by central agencies. Key elements shown to contribute to their success include the presence of individual educational/transition plans; self-determination training for students; and adequate information for students and their families. Transition specialists may also play a role as do multi-agency approaches. Very often, transition services are embedded within dedicated programmes which may be delivered within higher and further institutional settings.

A second effective mechanism identified relates to the interface between students with disabilities and higher education institutions at the point of application. In particular, good web-based outreach strategies and flexibility in admission procedures have proven successful in facilitating the third level application process. Within this context, the following have been shown to be effective: clear and accessible information for students with disabilities on college websites; differentiated admission procedures which are clearly communicated and supported appropriately by staff; and the reduction of administrative barriers to participation by establishing shared definitions of disability and a common approach to application across different institutions. In the Irish context, the experience of DARE was highlighted.

There is little literature available on measures to facilitate adults with disabilities to access adult and continuing education. This is a significant gap in the spectrum of provision particularly given the role which adult and continuing education can play in overcoming social exclusion per se and in acting as a pathway to more formal types of provision. We did, however, note the evidence of effectiveness on the part of inclusive education models in Canada which are aimed at individuals with intellectual disabilities, both school leavers and adults. This type of provision, now a feature of many Irish universities, includes fully inclusive models where students with intellectual disabilities participate to their ability in mainstream courses, as well as programmes designed exclusively for them. Success factors include the fact that these programmes are based on adult education pedagogies, allow the students to progress at their own pace and involve direct learning support.

Vocational training has few examples to point to in terms of effective practice in facilitating access. Such evidence as does exist indicates, first, the importance of adequate services at the point of entry to a training programme. This includes outreach and guidance services that support the disabled person to make the right choice of training opportunities. Second, it highlights the role of disability organisations in supporting access for people with disabilities in vocational training – which has been demonstrated in the Australian context.

The emphasis within the literature (and it appears also in practice) on young people transitioning to further or higher education is a positive feature, in so far as it may ensure that they can compete equally with peers. But the lack of attention to adult education and the more limited (as it appears from the literature) emphasis on access to vocational training is a less positive finding. This is particularly the case given the recognised need for lifelong learning; the need for ongoing up-skilling especially in a redundancy context and the fact that people may acquire disabilities which prevent them from continuing their job.

Two issues that might be expected to have some presence in the literature are absent. First, participation costs in education or training for adults. In particular welfare traps for disabled people on state benefits receive no mention. Such traps have been identified as a barrier to participation for disadvantaged people (Bogart 2007) so this lack of attention is unexpected. The second issue is administrative barriers to participation in education or training which again relates to eligibility for state supports. Where disabled adults receive a state payment, they are frequently prevented from engaging in training because the payment – or another factor such as age, current level of education – is outside the eligibility criteria for participation (DFI, 2009).

4 What Works in Facilitating People with Disabilities to Participate in Higher, Further, Adult and Continuing Education, Vocational Training and Vocational Rehabilitation?

4.1 Introduction

In Chapter 3 we examined measures to facilitate access to education and training by adults with disabilities. We now turn to literature on interventions which support their participation in higher and further education, continuing and adult education, vocational training and vocational rehabilitation programmes. We are specifically concerned with interventions which are effective in:

- enhancing the learning experience for adults with disabilities
- supporting them to maintain their participation in a course or programme over the full duration
- enabling them to acquire the qualifications associated with that course or programme.

Recalling the conceptual framework set out in Chapter 1, the following interventions on participation were identified.

Table 10. Examples of measures to support participation in education and training

Stage in Student Journey	Examples of Interventions at Student Level	at Institution Level		Indicators
Participation	Needs assessment Finance for subsistence Assistant personnel Befriending schemes Assistive technology Guidance On hand support	To support participation Transport Modified buildings	To support learning Pedagogies Teacher training Differentiated course material Universal design in learning	Completion rates Accreditation rates Accreditation level

Again, in this chapter, we must note a literature imbalance: not all the above measures were evident, particularly financial support and guidance interventions. In addition, most studies and reports pertain to the higher or further education sectors and frequently to younger students within these sectors. Far less material on supporting participation in vocational training was sourced and we found no material on adults with disabilities participating in continuing or adult education. Also, literature on supports such as transport and modified buildings was limited.

4.2 Supporting Students with Disabilities to Participate and Remain in Higher and Further Education

Most of the literature examined here on measures to support participation in higher and further education refers to students with disabilities per se without reference to their prior status. However, some studies do refer to the specific difficulties which school leavers with disabilities encounter entering a higher or further education setting. In general, studies have shown that young people with disabilities experience a variety of difficulties over and above those experienced by their non-disabled peers in moving from school to college. Some are related to extraneous factors, most notably the move from children's to adult services which may result in a loss of support (for example, personal assistance). But other factors are related to the college environment. For example, Getzel and Thoma (2008)*** based on focus groups with 34 students with mixed disabilities in one US university write: 'Contributing to the lack of persistence and retention of college students with disabilities is the issue of adapting to an entirely new set of challenges in managing their academic programme' (p77). These challenges include managing their accommodations along with their academic course work. 'Students are responsible for requesting supports and services, providing documentation to receive these accommodations and interacting with faculty to implement their supports' (Getzel & Thoma, 2008: p22)***. This situation is frequently made more difficult as many students are unprepared to disclose their disability or lack the understanding of how to access services on campus (ibid).

These and other issues affect participation and retention of students with disabilities: Schelly et al (2011)* note that nearly all US institutions of higher education struggle with persistence, retention and degree attainment on the part of such students. There, data show that while more are enrolling in university, they are less likely than their non-disabled peers to complete their courses and acquire a degree and those that do, take twice as long (National Council on Disability, 2003 cited in Schelly et al (2011,)*. Similarly research from New Zealand cites lack of self-determination on the part of students, poor instruction and a disability unfriendly campus climate all contribute to the low retention and graduation rate (Katsiyannis et al 2009)*. While the transition from secondary school to postsecondary life is difficult for all such students it may have an even more profound effect on those with intellectual disabilities in that they often move from an environment where they were carefully guided to a setting in which they are expected to achieve on their own (Brinckerhoff et al, 1992).

It is in this context that supports for students with disabilities are implemented and over the past two decades have increased significantly. A common feature is their tendency not to be based on disability type, but rather on the limitation or impairment that results from it. Jones *et al* (2001: p3) defined the need for special supports provision as arising from:

- language difficulty
- general/specific learning difficulty
- physical disability
- medically diagnosed condition with educational implications

- visual impairment
- hearing impairment
- emotional/behavioural difficulty
- a combination of two or more of the above.

It therefore follows that diverse supports may be needed within any educational setting and that they will be driven by specific student profiles. Reflecting this a variety of studies highlight the diverse range of supports necessary to ensure students with disabilities can complete their participation in higher and further education programmes (Getzel & Thoma 2008***). These relate to:

- physical accessibility
- funding
- disability service support
- assistive technologies
- information communication technologies (ICTs)
- accommodations in relation to assessments etc
- universal design
- enabling programmes: mentoring, self-determination, pastoral care
- teaching practice.

However, despite the expansion in disability services and supports in institutes of higher and further education, the challenges for students with disabilities have not been fully addressed. Stumbo et al (2009)* in a review of personal assistance supports in the US context note the 'variable, sometimes minimal or patchwork models of disability support services, especially for individuals with high support needs resulting from a physical disability' (p15). Similarly Stodden and Conway (2003)* state: 'Postsecondary educational services, supports and programmes available to students with disabilities vary extensively across states as well as from campus to campus, are generally not well developed or linked programmatically to instruction and tend to lean towards advocacy, informational services or remediation of content rather than support in the compensation areas necessary for independent learning and self reliance'. (Stodden & Conway 2003: p5)*. The same picture emerges in the UK. There, according to Riddell et al (2007) while higher education institutions have formulated disability policies and established disabled student support services, a gap between rhetorical policy and practice is evident, with most students struggling to receive ad hoc support (Vickerman & Blundel, 2010)**a. Thus, while the number of students with disabilities enrolling in universities and colleges has increased over the past decade or so, research suggests that inequalities in participation persist, not just in relation to overall numbers but also in relation to rates of retention and completion. In general it appears that while progress has been made on access and allied issues, much remains to be done to support participation, and these students can still find themselves facing difficult situations (CDS, 2009)**a.

In considering the studies reviewed below, therefore, it is important to bear in mind that no single elegant solution to the challenge of supporting students with disabilities to

participate in higher or further education is in place despite advances in recent years. In this chapter therefore we again take a broad approach to looking, first, at interventions targeted at individuals and those implemented at institution level; and, second, highlighting specific examples that appear most effective.

4.2.1 Disability support services

In line with legislation in the jurisdictions examined here, higher education institutions have established a disability support services office that provides relevant assistance. It has been called a vital component of a student's postsecondary education because of the wide range of services it provides. There are numerous models of the disability service but there are common features: needs assessment; support in accessing accommodations; academic support. The following examples from Ireland and the UK provide additional detail.

In their review of the Trinity College Dublin service, Phillips and Clark (2010)**a noted that the office employs seven full-time and two part-time staff, including an educational psychologist who offers a full screening service and an assistive technology officer. It can supply access to assistive technology, enhanced library and photocopying services and access to note-takers, interpreters and learning support tutors. Exam supports include extra time, rest breaks and technological aids as required. Philips and Clark note that Trinity's approach is to embed disability strongly in college policy so that it is threaded through and integrated with strategic and operational plans rather than conceived separately. In terms of day-to-day support, the disability service works closely with the academic liaison officer attached to the faculties students are attending so as to ensure good co-ordination and integration with academic matters. Students undergo a needs assessment with the disability service after which a learning and educational supports needs (LENs) report is produced. The LENs identifies the specific educational supports a student requires at lectures and during course assessments, including presentations and lecture notes in advance. It also sets out the accommodations provided by the disability service at formal examinations. The information in the LENs report is copied to relevant academic staff, including the student's tutor, to ensure full awareness of the accommodation needs required (Philips & Clark, 2010)**a.

In their study, Phillips and Clark developed case studies of six students in different Irish colleges and universities. They were considered highly self-reliant and some were initially reluctant to take up available supports because of concerns about compromising their independence. But the students also noted substantial benefits. The authors write: 'The importance of disability services offering a wide range of supports in a sensitive but persistent (if necessary) and nuanced way cannot be overstated' (Philips & Clark, 2010: p41)**a. The study found student contact with the disability service before entry appeared very important in terms of identifying and lining up financial, educational and practical supports, as well as preparing academic staff (ibid). The authors state further that if students are appropriately supported during first year and transition into second year, the journey to course completion and beyond into fourth level if desired is relatively straightforward (ibid: p41).

Taylor (2005)**a provides a case study from a UK university. In this university, in addition to centralised disability support services, it was considered necessary to develop a more devolved system of support whereby each school within the university would have a named member of the academic staff responsible for supporting students with disabilities. Taylor notes the activities identified by this university as necessary to support disabled students across the university as a whole. These were:

- providing advice for individuals with disabilities regarding entry to university
- identification of disabled students by admissions staff (using information from application forms)
- providing appropriate pastoral care for identified disabled students
- identifying and providing necessary alterations to premises required by disabled students
- identifying and providing special resources required by disabled students
- identifying and providing necessary alterations to teaching practice
- identifying and providing appropriate alterations to assessment practices
- providing appropriate advice for students and for academic and administrative staff
- in some instances, monitoring disabled students' progress and contact with parents/guardians/carers (Taylor, 2005: p26)**a.

Taylor provides no data on outcomes or levels of student satisfaction. Other studies, however, highlight the challenge of ensuring that all disabled student needs are met. One based on focus groups with students with disabilities in ten US colleges asked them about their experiences and satisfaction with disability support services (Dowrick *et al*, 2005)**a. All focus groups ranged in size from three to 19 participants, but the authors do not report on the overall number of participants in the study. The findings revealed that students believed the services were understaffed and aimed solely at those with the most urgent needs. They also believed service providers should focus on individual need rather than a formula according to the individual's type of disability.

The literature highlights one issue related to the effectiveness of disability services and that is how adequately they can accommodate a student's social as well as educational needs. This relates to the heading of befriending schemes identified in the conceptual framework. In Chapter 3 the difficulties in integrating into the student body were noted specifically regarding students with intellectual disabilities. The literature on disability support services raises this issue also and identifies approaches to promote social integration. One is based on developing the role of special education needs co-ordinators (SENCOs). Taylor (2005)**a in the study referred to above argues that disabled students should not be separated from 'their mainstream peer student group' unless separate provision is necessary and then ideally only when requested by the disabled student. He suggested SENCOs have a particular relevance here: 'The role of the special education needs co-ordinator in higher education should be to provide and organise support for disabled students, but in a manner that integrates them into university life rather than separates them' (p23).

A second approach to integration is that of raising awareness among the general student body. Davis (2008)***a reported on a UK project which sought to improve practice within small and specialist institutions. Awareness raising was considered to have helped to encourage students to disclose and come forward for screening for specific learning difficulties, a factor also related to successfully drawing down services. It helped to develop a culture among the student body where difference and diversity were understood and valued and also led to increased awareness and understanding of disability among staff, including senior managers and decision-makers. Interventions to raise awareness among the general student body included:

- providing information on disability support for all students at student induction sessions
- showing a DVD about disabled students at student inductions
- providing information for disabled students in all student handbooks
- involving the student union in project activities and in producing a newsletter for disabled students
- recruiting disabled students as 'ambassadors' at open days and other events
- postgraduate students acting as mentors and providing individual support for disabled students (Davis, 2008: p19)**a.

4.2.2 Accommodations

The issue of accommodations is important and receives some attention in the literature although the findings are varied. Overall, (and as with other forms of supports) it appears that despite legislative imperatives relating to reasonable accommodations, considerable variation exists. Some studies have even found that willingness to accommodate students with disabilities varies across departments in the same institution (Vasek 2005, cited in Brockelman, 2011)**b. Overall, the provision of accommodations is positively correlated with how effective they are considered to be by faculty staff (Bourke *et al*, 2000 cited in Brockelman, 2011)**b.

Janinga and Costenbader (2002 cited in Cawthon *et al*, 2010*) identified a range of accommodations across postsecondary institutions in the US. They found that:

- 88 per cent of postsecondary institutions provided extended time for students with disabilities
- 77 per cent provided tutors
- 69 per cent provided note-takers
- 62 per cent provided assistance with class registration
- 55 per cent made text available on tape
- 58 per cent provided adaptive technology
- 45 per cent made sign language interpreters available.

How typical this pattern is of other jurisdictions or how much it may have changed in recent years is impossible to say. There appear to be ongoing issues, however, with satisfaction levels expressed by students on accommodations although in general there is broad satisfaction. Cawthon *et al* (2010)* cites research showing that students do not always consider accommodations to be effective. For example, Kurth and Meallard (2002) found they were rated ineffective as often as 24 per cent of the time. They hypothesised that many accommodations offered by universities are ineffective and inappropriate because they are assigned on the basis of the student's disability rather than understanding what they will practically need in the classroom environment. In their study, students with learning disabilities rated note-takers, extended time on tests, adaptive technology, preferential classroom seating, and public transportation as being effective 80 to 88 per cent of the time. Tutoring services, tape recorders, alternative test locations, taped text/notes and mental health services were considered effective 64 to 78 per cent of the time.

Other research also indicates disparities of opinion on satisfaction with accommodations. Waterfield *et al* (2006) cited in CDS (2009)***a reported 83 per cent student satisfaction with 'special arrangements'. However, CDS noted that their study's qualitative aspect revealed considerable dissatisfaction with matters such as isolated exam rooms, distractions with different finishing times, sitting for a long time, exam pressure, time pressure, not feeling well on the day and so on.

Overall, the research suggests at a minimum, an unevenness in delivery of accommodations and student satisfaction. In general, positive assessments of accommodations are more likely when they are linked to personal needs, preferences and circumstances rather than being based on the disability per se.

4.2.3 Differentiated assessment

Differentiated assessment, which may be considered a particular type of accommodation, appears widely available although evidence of its effectiveness is also somewhat ambiguous. For example, Waterfield *et al* (2006) cited above found most disabled students in their study reported receiving special arrangements under formal examination conditions. However, the students also indicated that they preferred continuous assessment, multiple choice, oral examination, coursework and portfolio assessment and only 30 per cent reported that these were available.

Vickerman and Blundell (2012)***a cite UK research and found just over 11 per cent of disabled students indicated their assessments did not cater for their needs, compared with 3.6 per cent of their non-disabled peers (Fuller *et al*, 2004). The authors acknowledge that the differences between the student groups were not vast, but note a perception that assessments were more restrictive for the disabled students. Where the latter felt their learning, teaching and assessment were restrictive this tended to be a result of inappropriate learning objectives, a lack of adapted equipment for practical activities, an absence of teaching modifications by tutors, little discussion with students on barriers to learning, and assessment strategies that significantly disadvantaged them (cited in Vickerman & Blundell, 2012)***a

A common theme across many studies of differentiated assessments is the importance of staff perceptions (Philips & Clark, 2010**a; Kurth & Mellard, 2002, Fuller et al 2004). Brockelman (2011)**b investigated how college staff at a large university in the US midwest rated the effectiveness of academic strategies to retain students with psychiatric difficulties. Her study surveyed 561 staff, (but achieved a response rate of only 20 per cent) and examined the perspectives of science, technology, engineering and maths (STEM) and non-STEM faculty on the assumption that how student knowledge is assessed differs across these faculties. Brockelman found two of the most commonly used strategies were extending assignment deadlines and allowing students extra time to complete an exam. Both were considered effective and the author suggests this was because the student had asked for them. In contrast, discussing the problem with the student, likely to be initiated by the professor, was not considered effective. The strategy that was rated least effective was allowing a student to miss a class due to a disabilityrelated problem. Interesting cross-faculty variation was also found. Engineering made more exam-related accommodations while non-STEM made more classroom accommodations perhaps, the author suggests because non-STEM disciplines assign papers or projects more often than they give exams (Brockelman, 2011)**b.

Riddell *et al* (2007) in highlighting the role of staff found some disabled students believed staff displayed considerable anxiety about assessment, in particular, about conferring unfair advantage in comparison with non-disabled counterparts who had difficulty with courses. This, the authors suggest, demonstrates a lack of awareness on the tutors' part of legislative requirements and too little training in how to respond to diversity in learning, teaching and assessment. Other writers also note that while equality legislation is important it must be matched by staff education and training so they can respond proactively to the diverse needs of the disabled students they support (Vickerman & Blundell, 2012)**^a.

Davis (2008)**a identified modifications to assessment in small and specialised UK colleges and stressed how staff were resourced to implement these. Several institutions formally reviewed and altered their assessment and examination policies and procedures, to ensure that disabled students had an equal opportunity to demonstrate their achievement of learning outcomes. Actions taken included:

- written guidance on alternative forms of assessment covering assessment policy and procedures for disabled students
- a flow chart to explain agreed process for seeking modified forms of assessment
- examples of acceptable alternative forms of assessment for written and performance assessments
- information on the assistive technologies and human support that may be required by disabled students undertaking assessments
- guidance on situations when a different form of testing may be required (for example oral presentations instead of written work) as well as situations where a different skill set can be tested (for example a memory test instead of a sight-reading test).

• Student consultation in developing appropriate assessments is highlighted as important. England's SPACE project is an interesting example of this. Connected with the introduction of a new assessment toolkit across disciplines from the humanities to civil engineering in some higher education institutions, it was discussed by CDS (2009)**a in their review of good practice in England and Wales. The authors note a broadly positive response (in attitudes and grades) to the introduction of newer forms of assessment such as oral assessment on tape, design reports, portfolios and so on. In particular, having a choice of assessment systems was deemed successful and the spinoff reduced requests for special provision, extra time (see Box 3).

Box 3: SPACE Project, England

Background: SPACE (Staff-Student Partnership for Assessment Change and Evaluation) was a three-year project involving a consortium of eight institutions in southwest England. The aim was to develop and promote alternative forms of assessment 'as a way of facilitating a more inclusive approach to assessment' (SPACE, 2008, p1). Students are represented as well as academic staff and disability officers, and information was available on the project through a website as well as in publications arising from it.

Actions: The core activity was to develop an alternative assessment toolkit in arts, education, business, science, humanities, human sciences and technology. Key elements included:

- a critical review of the issues governing the choice of assessment
- case studies of inclusive assessment
- institutional, departmental and individual procedures to support the process of assessment change; and staff and student evaluation forms.

An important feature was to take account of perspectives and voices of disabled students, so that the main SPACE document has sections on how they view 'special arrangements' for assessments and current assessment modes, their preferred choice of assessment modes, what they say about assessments based on group work and on oral presentations, and what they say about their assessment performance.

The emphasis was to encourage dialogue and innovation between disability services and academic departments and support institutional change. A framework for looking at assessment was adopted that distinguished between a 'contingent approach' which involved assimilation into existing systems (via arrangements for extra time, amanuensis and so on), an 'alternative approach' offering a repertoire of assessments embedded into course design (such as providing a viva voce rather than written assignment), and an 'inclusive approach' capable of assessing the same learning outcomes in different ways (as with a flexible range of assessment modes available to all students). The inclusive approach is concerned with equity, regardless of disability, learning style or learning experience.

Source: CDS, 2009**a

Similarly, the review of good practice in England and Wales developed by CDS (2009)**a also stressed the importance of student involvement in developing alternative forms of assessment and recommend the following for assessment:

- adopting more inclusive approaches to assessment will require institutional changes and levels of commitment that go well beyond individual teaching teams and departments
- student perceptions of assessment need to be kept under review, and may help inform curriculum change and plans for delivery of teaching
- the impact of differing modes of assessment should be monitored periodically to ensure that appropriate pathways are available for all students
- flexibility and choice over assessment methods should be considered and reviewed regularly, paying attention to student diversity as well as to desired learning outcomes
- students should be fully informed of potential assessment mode choices, and may need detailed advice when exercising these choices
- staff must be resourced adequately to learn more about diverse needs, and to design and implement changes in the curriculum, modes of delivery, and assessment methods. (CDS, 2009: p145)**a

4.2.4 Enabling programmes for students with disabilities

A key difference between second and higher level education for students with disabilities is that at tertiary level they must take responsibility for their own education (Field *et al*, 2003). Field *et al* (2003) note that research has repeatedly shown that these students need to have developed competence in functional academic, community living, personal-social, vocational, and self-determination skills before entering postsecondary settings. Philips and Clark (2010)***a make a similar observation in the Irish context.

Despite improvement in transition programmes, in the US, students with disabilities are entering postsecondary education without sufficient self-advocacy skills and knowledge of the postsecondary disability services available (Center for the Study of Postsecondary Educational Supports, 2007). Lehmann *et al* (2000) in their study of 35 US college students with a variety of disabilities found lack of self-advocacy skills was a dominant theme in their experience of higher education. Studies also suggest that they enter postsecondary programmes without an understanding of how their disability affects their learning (Katsiyannis *et al* 2009)*.

One way to address this is by offering self-determination programmes, discussed in Chapter 3, which incorporate self-advocacy and self-efficacy skills. In the context of participation, self-determination has been defined as 'a set of personal or interpersonal skills that includes acceptance of a disability and how it affects learning, understanding which support services are needed, knowing how to describe one's disability and the need for certain supports to service providers and having the determination to overcome obstacles that may be presented' (Getzel & Thoma 2008: p78)***. Getzel and Thoma (2008)*** conducted focus groups with 34 students with a variety of physical, learning,

sensory and emotional disabilities who had self-disclosed their disability to services at community colleges or universities in the state of Virginia. The objective was to identify the factors that enabled them to remain in college. The study found that self-determination was most frequently cited by students as helping them to stay in college and get the supports they needed. They cited problem-solving skills, learning about oneself and one's disability, goal setting and self-management among the outcomes of their training in self-determination skills.

In identifying self-determination skills considered essential to remaining in college with necessary supports, participants identified: seeking services from the disability support office and from college services available to all students; forming relationships with professors and instructors; developing support systems on campus with friends, support groups, and the disability support office and gaining self-awareness and understanding of themselves to persevere. The authors highlight the need to ensure that strategies are in place to develop self-determination in students with disabilities at the appropriate time to avoid learning by trial and error in the college/university setting (Getzel & Thoma, 2008: p82)***.

Self-determination programmes are frequently used to support the participation of students with intellectual disabilities. One example of such provision is the Learning Opportunities Task Force (LOTF) established by the Ontario government in 1997 and reported on in Nichols *et al* (2002)***. This is detailed in Box 4.

Box 4: LOTF Initiative, Ontario

Background: In 1997, the Learning Opportunities Task Force (LOTF) commissioned 13 pilot projects at postsecondary institutions across Ontario to address concerns on the ability of students with learning difficulties to transition to and succeed in the postsecondary environment.

Approach: The LOTF pilot projects implemented intensive learning skills, education and self-advocacy interventions for students enrolled in such projects. Although the specific delivery methods and time devoted to each project component differed at each institution, all LOTF programmes required mandatory participation (at least in the first year of the programme) in the following activities or components:

- having students participate in an up-to-date psycho-educational evaluation
- helping them evaluate the appropriateness of their chosen postsecondary programme and providing academic advice where appropriate
- teaching them about their disability and appropriate compensatory strategies
- teaching students to self-advocate
- teaching them about their educational rights and responsibilities
- encouraging them to self-identify and seek appropriate assistance and to become more independent after first year
- teaching students how to organise for living and learning

- facilitating a support network
- providing one-to-one learning strategies and assistive technology coaching and support.

While other aspects of each pilot project may have differed between sites, these nine components were included in all LOTF pilot projects. Students could choose to continue participating in components of relevance after their first year in the programme, but did not have to participate in every component after the initial year.

Outcomes: Of those who completed the exit survey:

- 83 per cent of respondents said the pilot project had contributed significantly to their academic success; 5 per cent said it had contributed somewhat to their success
- 99 per cent said they would recommend participation in such specific support programmes to a friend and an equivalent number said they would participate again in such a programme
- 53 per cent received marks in the A to B range in their courses; 40 per cent received a C with only 7 per cent reporting marks below a C
- no students in the university-based programs had dropped out.

Source: Nichols et al (2002)***

Kirkpatrick and Earwaker (1997)*** described a slightly different self-determining experience for adults with an intellectual disability in Winchester, UK. As tutors involved in the delivery of a three-year degree course in social and professional studies for this group, they wanted to include people with an intellectual disability in the delivery of the course. They hoped this action would demonstrate the concepts of participation and inclusion, and that the target group would have access to information about the education of potential service workers and the opportunity to influence that education. Over a three-year period, members of a self advocacy group assumed increasing responsibility within the degree course as lecturers, course planners and committee members. They were also involved in selecting students for the degree course. Based on participant views, the authors conclude that the adults with an intellectual disability involved in this process gained a great deal through the experience of being in the 'educator' role thus illustrating how this group can continue to benefit from educational opportunities even as adults.

Another approach supporting self-determination is based on mentoring. This has been described as a 'dynamic, reciprocal, long-term formal or informal relationship that focuses on personal and/or professional development' (Foster Heckman *et al* 2007 p2). While it is often thought of as face-to-face interaction, it is now widely accepted that mentoring models can take several forms. These include one-to-one, group, community-based interventions and peer mentoring (Stumbo *et al* 2010***, Brown *et al* 2010***). Electronic methodologies using bulletin boards, online discussion groups are also considered a form of mentoring (Brown *et al*, 2010: p99)***. In practice, this approach is most usually used with students with intellectual or psychiatric disabilities.

Research shows that mentoring can be effective. Brown et al (2010)*** conducted a review of evidence based US literature on mentoring of students in higher education. They cite Zwart and Kalmeyn's study (2001) of a peer-based mentoring programme in Michigan which compared outcomes for 22 students with an intellectual disability who took part in a mentoring programme with those of 20 similar students who did not. The authors concluded that programme participants benefited from an increase in self-efficacy including attitude, motivation use of time management principles, a decrease in anxiety about school performance, selecting main ideas and test preparation. However they urge caution in viewing the data due to study limitations including its small size. Stumbo et al (2010)*** in their case studies of four US mentoring programmes, cite studies that indicated mentoring outcomes include improved academic attendance and performance, improved self-worth and self determination. They also cite research, however, showing nearly 50 per cent of mentorships terminate in the first or second month (Karcher et al, 2005).

The specific features of mentoring programmes identified as effective are:

- mentoring needs to be well designed, implemented and evaluated (Stumbo et al 2010)***
- it must have sufficient resources in terms of time, budget and staff (Stumbo et al 2010)***
- programmes should be linked to a flexible, multi-layered system of supports including training, workshops, technology and human supports. (Brown et al, 2010)***.

4.2.5 Universal design

In Chapter 3, we note the emergence of universal design in education and its relevance to supporting access. Here we look more specifically at the area in the context of supporting participation by enhancing the learning experience. This has received significant US interest in the past decade or so and has produced some frequently interchangeable labels. These include universal design in instruction and universal design for instruction. The application of the nine principles noted in Chapter 3 were adapted for the learning environment by Shaw *et al* (2001) and reported in Roberts *et al* (2011)**^b as shown in Box.5. They have been summarised as presenting multiple means of representation, engagement, and expression (CAST, 2011).

Box 5: Principles of universal design applied to instruction (UDI)

- Equitable use: accessing course information, such as syllabi, in a variety of formats, including print, disk and online.
- 2. **Flexibility in use**: varying instructional methods, including lecture, discussion and individual and group activities.
- 3. **Simple and intuitive**: clearly describing course expectations for grading, in different formats, for example narrative and rubrics.

- 4. Perceptible information: using videos that include subtitles, or captioning, for those who may not hear, for whom English is not a first language, or for those who have trouble processing verbal information.
- Tolerance for error: providing ongoing and continual feedback on coursework rather than at specified interim periods, such as mid-term or final exams.
- 6. **Low physical effort**: providing lecture notes, so students who have difficulty taking notes do not need to do so.
- Size and space for approach and use: making seating easily accessible, if possible, so everyone can see each other and communicate with one another directly. Circular seating may address this principle.
- 8. **Community of learners**: creating a variety of learning settings, for example, use of email groups, social networking sites, or chat rooms.
- Instructional climate: including a statement in the syllabus indicating the desire to meet the instructional needs of all students and for students to convey their needs to the instructor.

Source: Roberts et al, 2011, p6.

Another universal design model for education involves learning (UDL) which retains the focus on inclusion while reducing the principles to just three. These are:

- multiple means of representation to give learners various ways of acquiring information and knowledge
- multiple means of student action and expression to provide learners alternatives for demonstrating what they know
- multiple means of student engagement to tap into learners' interests, challenge them appropriately, and motivate them to learn (CAST, 2011).

Universal design operates on the principle of incorporating accessibility into all facets of design from the outset, rather than introducing accommodations targeted at individual students with disabilities (McGuire, 2011)**^b. In this sense it is 'proactive' rather than 'retrofitting elements' (McGuire, 2011: p40)**^b. Most literature on UDI/UDL focuses on interventions to train teachers, lecturers and similar and consequently, most studies are based on assessing the impact on teaching methods.

Parker *et al* (2007-2008) documented a case of modifying a large core course in special education for undergraduates at a public university by employing UDI principles and adult learning theories. In this study, the UDI principles were used to develop predictable and accessible instruction for individuals with diverse abilities, address their varied learning pace and prerequisite skills, minimise non-essential physical effort, stimulate student interest and attention by presenting information in different mediums, and create a welcoming and inclusive instructional environment. Parker analysed 114 students' online interaction, discussion and course evaluations. The latter indicated the course was better than others offered in the department and other undergraduate

courses and noted their particular appreciation for having course materials available online. Based on the positive student perception of the course, the authors suggested that UDI in combination with adult learning theories could 'create positive solutions for many of the challenges inherent in a large, lecture driven "core" classroom environment' (cited in Roberts *et al*, 2011: p63)**^b.

Spooner *et al* (2007) conducted a study of the effects of a one-hour training course on how to apply UDI principles to lesson plans for students with disabilities. A total of 72 graduate and undergraduates studying to be teachers of special education and general education were involved. These were randomly assigned to a group that received training and one that did not (the control group). The study found significant differences in the two groups and concluded that even simple training could improve the ability of student teachers to develop accessible lesson plans for all students including those with disabilities.

Schelly *et al* (2011)* report on the ACCESS project at Colorado State University which adopted a three-part UDL framework focused on teacher training to ensure that students with disabilities receive a higher quality higher education. The authors studied changes in instructor teaching behaviour following this training as well as student perception. A total of 1,195 students took part in the post-training survey of which 98 reported a disability. Overall, students reported meaningful improvement in teacher instruction methods, but the study does not report separately on the views of students who reported a disability.

At Longwood University in Virginia, Project LINC (Learning in Inclusive Classrooms) applied the principles of UDI to foreign language learning rather than teacher training. This project is reported on in McGuire's selective review of literature on the application of universal design (McGuire, 2011)**b. Using two broad measures of student outcomes, final grades and retention, Project LINC results indicate that the grades of students with and without disabilities across instructors and across languages were similar whereas previously, fewer students with disabilities received final grades of A-C, and more received Fs. Similarly, the withdrawal rate for both student groups was more consistent whereas previously the withdrawal rate of students with disabilities was more than three times that of those without (McGuire, 2011: p48)**b. This author concludes that while at this point no direct causal relationship has been established between application of UDI principles and the outcomes cited above, the results are encouraging (McGuire, 2011)**b.

McGuire and Scott (2006) conducted a qualitative study consisting of four focus groups with 23 post secondary students with learning disabilities to explore the validity of UDI as a construct: '... the focus groups sought to obtain student opinions and perceptions about the attributes of a good college course, teaching methods and strategies that promoted learning, and the challenges and barriers experienced in college courses' (cited in Roberts *et al*, 2011: p9)**^b. The instructional methods that students said made up a 'good' college course included:

- clear expectations
- organisational materials such as course outlines and study guides
- information presented in multiple formats
- affirmative classroom experiences
- associating information with aspects of real life
- frequent formative feedback
- supportive of diverse learning need
- effective assessment strategies, for example well-designed exams.

Within the literature on UDI, however, caution is urged. For example, a recent review of studies of variable quality (Roberts *et al*, 2011)**^b argued that while the nascent literature promotes UDI use in postsecondary education, 'there is very little research to support its effectiveness as a means to improve postsecondary student outcomes such as retention rates and graduation rates' (Roberts, 2011: p13)**^b. They conclude that while it is an exciting conceptual approach that appears theoretically sound, it lacks a substantial empirical research base. Similarly, McGuire (2011: p51)**^b suggests, on the basis of existing literature on UDI, that questions remain around 'the appropriate indicators of the efficacy of UDI'. Schelly *et al* (2011)* also note that the literature is long on best practices and principles but short on empirical evidence of its benefits.

A slightly different approach was described by Tinklin *et al* (2004)***a in their report on the Teachability programme which began in Scotland and subsequently introduced in England. Teachability is a resource to review teaching and learning by academics, to make departments better prepared to work with disabled students, thereby improving teaching practice for all students. The idea is to engage academics in discussing their current practice, highlighting exclusive practices and identifying areas for change. The first step is to discuss a subject/discipline's core requirements — an important step in being able to identify alternative means of assessment which do not compromise standards. For example, language specialists must decide if a core requirement of their discipline is for students to speak the language, in which case those with speech impediments might be excluded. , or whether the core requirement means students should be able to communicate in the language, in which case alternative means of expression can be found (Teachability, 2002, p29; Tinklin *et al*, 2004)***a

4.2.6 The use of ICT

In the past decade or so, interventions to support students with disabilities based on information communication technology (ICT) and especially multimedia and e-learning methodologies have increased considerably. The hypothesis is that ICT can reduce or overcome barriers resulting from the nature of the physical learning environment and teaching delivery methods. It is also considered to offer more opportunities for 'blended learning', that is choice of learning mode and learning situation to fit it with impairment, home and support systems (CDS 2009)**.

There are numerous examples of ICT use in the Irish context. For example, University College Cork operates the Blackboard Learning System and its academics undergo at least 20 hours' disability training. When successfully operated by staff who post notes and articles onto the system, this can address students having to ask for such notes,. High levels of academic co-operation and good IT competence on campus are necessary for its effectiveness. (Philips & Clark, 2010)***^a.

A good deal of research into ICT use focuses on meeting technical challenges such as adopting the optimum platforms and virtual learning environments and adapting them appropriately. Much research is available but it is beyond the scope of this review to discuss it in any detail. UNESCO (2011)^{XX} recently conducted a useful overview of ICT use in delivery of education to (mostly young) people with disabilities in higher or further education. Based on extensive review of case studies, UNESCO (ibid)^{XX} developed the following recommendations for ICT use:

- ICT in education for people with disabilities should not be seen as an end in itself

 it should be seen as a means, or a tool for increasing effective access to and
 meaningful participation in educational opportunities. This access and participation
 should have the ultimate goal of increasing life chances and opportunities for
 people with disabilities.
- Such use of ICT needs to be geared towards supporting inclusive education. ICT
 should be an integral tool for inclusion and not 'separate' to the work of all teachers/
 educational professionals. A conceptual framework for using ICT in education for
 people with disabilities within inclusive settings is that it should be inclusive in terms
 of its use as well as its purpose.
- ICT availability for those with disabilities must be viewed within a continuum of
 educational opportunities across lifelong learning. ICT that supports an individual
 person's learning must be available to them in any formal or informal learning
 situation they wish to engage in.
- The implementation of ICT in this context must take a systemic approach. This
 means that at the level of the individual learner, an organisation or the wider
 educational system levels, a range of interconnected factors needs to be considered
 and addressed. Key here are access to ICT, training of professionals, the development
 of new approaches and tools as well as the policy framework supporting its use in
 education for people with disabilities.
- Box 6 contains a number of examples of ICT use in educating and training adults with disabilities, identified by UNESCO.

Box 6: Examples of ICTs in education

Handicarte is a research-based ICT tool to support mobility for visually
impaired students in higher education in France. The initiative is a
technological and technical innovation of a tool that helps 'moving' on
campus. It is software that calculates the best itinerary from one spot to
another by choosing the easiest, most accessible route. The project started
with a group of students who aimed to create a local travelling system

- to help a person with physical disabilities avoid obstacles. The project evolved and support for people with visual disabilities was integrated to the project's design.
- In Estonia, the entire VET and HE sectors are involved in the Estonian
 e-Learning Development Centre (ELDC). This initiative uses e-learning
 solutions to increase the accessibility of vocational training and higher
 education for people with disabilities. ELDC supports the selection of
 e-courses and co-ordinating reaching and e-learning resources in all
 vocational and higher educational institutions. Staff in both sectors receive
 training and students with disabilities are involved in testing hardware and
 software to ensure accessibility.
- Luovi Vocational College operates nationwide in Finland, in 24 locations. It provides vocational education and training for students with special needs. The project aims to develop e-learning for Luovi College students using ICT-based Individual communication environments and possibilities, as well as develop learning materials, student assessment and criteria for vocational training. The activities are a part of an ESF project called 'Developing integration, equal opportunities and participation of people with severe disability (VAVA II)' which involves 10 staff members, students with severe disabilities as well as project partners in Eastern Finland.

Source: UNESCO, 2011xx

ICT use continues to expand and develop and as technological innovations continue, more valuable developments are likely. However, Sloan *et al* (2006) stress that ICT may not provide solutions to all challenges at all times: '... it is eminently possible that a specific multimedia e-learning resource may not be accessible to students with a particular impairment – for example, visual impairment – but [that it] significantly enhances accessibility for students with other access needs' (Sloan *et al* 2006, p139). They suggest that many technical innovations may require further modification and adaptation for students with differing impairments, and the degree of success and exact impact will sometimes be difficult to predict.

4.2.7 Other supports

Surprisingly few studies of assistive technologies, funding, personal supports or physical access were found in the literature, with personal supports receiving surprisingly little attention. Frequently the only reference to these types of support notes the withdrawal of personal supports in transition from second level school to higher education as a challenge facing school leavers with a disability. Stumbo *et al* 2009* reviewed the literature on the provision of personal supports at higher education institutes for students with severe physical disabilities in the US. They found these supports are infrequently provided and suggest their high cost disincentivises to universities who can meet the needs of students with less severe difficulties more simply and cost effectively. Philips and Clark (2010)***a note that student preference may vary on personal supports over assistive technology supports – the latter sometimes being perceived as enabling

more independence. Interestingly too, this study is one of the very few to acknowledge the potential need for childcare especially on the part of women students.

Assistive technologies also appear to attract little attention in the literature. In the Irish context, Philips and Clark (2010)***a have described such services at University College Cork and Trinity College Dublin:

- UCC hosts an assistive technology laboratory where students can access computers with specialist software as well as specialist devices such as dictaphones, CCTV (magnification device), and portable note-taking devices. Students are encouraged to access technology that can be transferred for workplace use (lightweight IT devices rather than laptops). The lab's work includes orientation programmes, needs assessments, identifying and sourcing appropriate technology and software, training students in its use, identifying other supports they might need such as a note-taker, PA/EA (educational assistant), alternative exam options, tutors to help with specific academic areas, and transport. The lab also has specialised scanning technology which can scan text books and upload onto computers.
- TCD has three modern resource rooms called assistive technology information centres. Two of these are on campus and a third is in St James's Hospital. Examples of low-level AT on offer include ergonomic aids and adjustments to computer settings, read and write software and mind mapping. High level AT is also available at the centres and includes screen reading software, Dragon voice dictation software and Zoom text screen magnification software. Advanced scanning software is also available which allows common computer files to be read aloud and more sophisticated packages enable blind users to scan in documents and convert the scanned image into on-screen text, from which they can have the text read out to them, add their own notes and save the modified file for later use.

Financial supports also receive little attention in the literature although the lack of sufficient financial resources and knowledge of how to acquire them were noted as a difficulty for student with disabilities in higher education (Lehmann *et al*, 2000). In the Irish context, the availability of financial assistance for day-to-day living expenses for mature students (grant aid or disability allowances) was an essential prerequisite for entry to higher education, as was the lack of fees (Phillips & Clark, 2010)***a. That study also interviewed institutions about HEA finance from the fund for students with disabilities for such supports as PAs/EAs, interpreters and note-takers, AT, learning/academic support and transport. The institutions interviewed believed the fund made a significant difference to the quality, appropriateness and availability of disability services and has improved the opportunity for people with disabilities, and particularly people with high support needs, to access, benefit from and progress within higher education (Philips & Clark, 2010)***a.

4.2.8 Role of staff training

Earlier we noted the importance of staff in relation to accommodations and differentiated assessment. More generally, quite a few studies refer to the negative impact which improperly trained or resourced staff can have on the implementation of

services, supports and accommodations. Goode (2007)* conducted a consultation with students with disability in a UK university considered to be an example of good practice for its wide range of disability supports, services and accommodations. Nonetheless, students identified many problems which made their participation difficult, some stemming from staff attitudes. Vickerman and Blundell (2012)**a also found good experiences for this group largely depended on the attitudes, experience and personal knowledge of particular staff members, rather than institutional policies and provision, which varied greatly between academic departments. Similarly, in the Irish context Shevlin et al (2004)* in their study of 16 students with mixed disabilities found they encountered serious difficulties with lack of knowledge, underdeveloped systemic supports and low expectations by staff.

A US study found teaching staff reported feeling they had no adequate understanding of disability law, or enough understanding of specific learning disabilities to create accommodations for students, and that they were unaccustomed to working with the institute's disability offices (Murray et al, 2008 cited in Cawthon et al 2010: p114*). Katsiyannis et al (2009: p42)* in a selective review of practice also stress the importance of staff training in legal and practice matters. Fuller et al (2009) emphasised how a UK university responded to the implications of the Disability Discrimination Act. They found staff were not well informed on disability legislation, were unaware of their duties towards the students it applied to, and the university system provided them with no clear information on the law. The need for more communication between central services and academic departments to ensure more effective support was noted.

On staff awareness and compliance, CDS (2009)***a write: 'At present, not enough systematic information is available on staff reactions to parts of the equality agenda about why, when and where there might be opposition or hostility, and on the causes for any such phenomena ... it is inadequate to rely on exhortation to generate or consolidate change. The material under review here suggests that relationships (between all stakeholders) develop on ad hoc bases with mixed benefits. Given this, one essential target may be to develop the kinds of support systems and learning environments that consistently facilitate constructive interactions' (CDS, 2009: p38)***a.

In the Irish context, AHEAD designs and delivers customised training on inclusive education and employment practices. Among its courses are the following: Including Students with Dyslexia in Nursing; Including and Supporting Specific Disabilities in the Learning Environment: for example Students with Dyslexia/Aspergers; Identifying Reasonable Accommodations. These are interactive and involve a range of activities. An online course run by AHEAD for teachers and professionals in further and higher education updates their skills and enables them to confidently include students with disabilities.

The Teachability project, cited above, also has a strong focus on staff training. It operates on the basic premise that as academic staff design and deliver courses, they are in the best position to develop inclusive practices. Teachability involves resourcing teaching staff to facilitate inclusive and accessible curricula in their study areas. These resources include material on:

- creating accessible lectures, seminars and information on courses
- accessible course design
- creating accessible placements and practical classes
- creating accessible e-learning resources for disabled students
- creating accessible examinations and assessments.

4.3 Interventions to Support Participation in Vocational Training

In this section, we turn to the more limited literature available on measures to support participation of adults with disabilities in vocational training, which pertains to adults participating in this training without reference to their prior status. At the outset, it is important to note quite significant differences in the literature relating to vocational training compared with that on higher or further education:

- First, whereas most of the latter is produced by academic researchers and published in peer reviewed journals, the literature on training and rehabilitation tends to be produced, or more accurately, collected by international organisations such as the ILO, ANED and the OECD.
- Second, whereas the higher education literature focuses somewhat narrowly on specific interventions, the literature on training emphasises overarching frameworks or strategies.
- Finally, studies of vocational training tend not to refer to an institutional context in the way that studies of higher and further education do. Instead, a recurring theme is multiagency or partnership approaches.

Internationally, developments in vocational training have echoed those in education in the move from institutionalised to community-based provision. This shift has been legislated for in most jurisdictions and is usually accompanied by demand side measures such as employment quotas and anti-discrimination legislation. However vocational training can be seen as complementing these approaches by providing vocational skills training services as well as reasonable accommodation in order to increase the productivity and competitiveness of persons with disabilities (USAID, 2009)^{xx}. ANED (2011)xx notes that most laws and schemes on vocational training in Europe are recent – mostly from 2004 onwards – indicating a renewed commitment to training disabled people and particularly a concern for youth who after compulsory schooling are not in employment, education or training. The ANED report also notes that support specifically for vocational training is more likely to be publicly regulated than support for academic courses in universities. But despite recent developments, the overall picture for vocational training for adults with disabilities remains problematic (ANED, 2011)^{XX}. At an ILO regional meeting on the theme of vocational training for people with disabilities in 2007 one speaker noted: 'There is a widespread lack of training among persons with disabilities... A complication arises from differences between education systems and the varying impact the same level of education can have on different individuals, their outcomes and concrete circumstances. The initial deficiency is compounded by

inequalities in access to further training, either due to discrimination in connection with the labour market perception of persons with disabilities, or more generally because, only too often, persons with disabilities do not have the level of education required to gain access to vocational training that will lead to qualification' (Velche, 2007 in ILO [2007 p22])^{xx}.

As noted, studies of vocational training are broadly focused on strategies rather than specific supports. However on the basis of their review of education and training provision for disabled adults in a number of countries, ANED (2011)^{xx} has identified the following supports for participants with disabilities in vocational training:

- Provision of residential training in rural areas, or allowing training as close as
 possible to the trainees' home. Some countries provide free transport and/or
 assistance to and from training sites.
- Special arrangements for examinations or adapted forms of assessment or acknowledging of skills.
- Special support to complete training, including an extension of the duration of the training course. A lot of variation in relation to this exists, with some countries specifying the additional time allowed and others correlating the duration with each individual's needs.
- Technical support to adapt tools, machines and the workplace to trainee needs.
- Financial support sometimes linked to the type of training or to trainee age.

ANED's summary notes that most country reports state that existing data do not allow for a thorough assessment of the impact of resources allocated to the diversity of trainees and vocational training centres or schemes. Similarly, in its report on vocational training in Europe and Eurasia, USAID (2009)^{xx} also notes the lack of provision, literature and examples of good practice in Europe.

At this point, it appears a broad range of vocational training provision is in place which reflects different trends and nuances in policy thinking particularly on catering for specific categories of disability. In particular (and as with higher and further education) specific provision for those with general learning disabilities has emerged in countries such as Germany, Hungary, Iceland and Denmark and Poland. Other forms of provision include segregated programmes for people with disabilities, incorporation into mainstream training programmes and job-based training. Basically vocational training for people with disabilities can be considered under these headings:

- specialised, segregated
- mainstream
- apprenticeship
- employment-based.

In the following sections, we review the literature on each of these.

4.3.1 Specialised, segregated vocational training

Vocational skills training for people with disabilities has traditionally been offered in sheltered, segregated settings, which usually means that people with disabilities are congregated and supervised or trained by people outside those groups (Powers, 2008)^{xx}. According to UNICEF and the World Bank, European governments spend up to 1 per cent of GDP in service and care provision for people with disabilities primarily by means of a centralised, segregated, institution-based service delivery system (UNICEF & World Bank, 2003)xx. But it has been claimed that these systems are not only expensive, but also less effective in preparing individuals to successfully transition into gainful employment and mainstream society (Tobis, 2000). According to USAID (2009)xx, such programs can play an important role for some individuals with more challenging needs but may not be the most appropriate approach to vocational skills training for most of those with disabilities, particularly those interested in integrating into their communities through gainful, competitive employment in the open labour market. The USAID report claims that 'people with disabilities who are a part of the segregated educational and vocational skills training and employment-related service delivery system in Europe and Eurasia are ill-prepared to transition into gainful employment and mainstream society' (USAID, 2009 p.v)^{xx}.

Experience of segregated training in the UK and in Ireland supports and opposes this argument. In the UK, Maton et al (2000)*** assessed the effectiveness of segregated residential training programmes for individuals with disabilities, mostly physical or sensory. They surveyed 150 out of 475 ex-trainees and their findings appear to contradict the USAID statement cited above. First, participants rated the actual training they received very highly. Programme content was rated highest in 'skilled technical' (for example, engineering) where 86 per cent of the 150 ex-trainees surveyed rated it excellent. Ratings were lowest in ICT-based training where 42 per cent of ex-trainees rated programme content as adequate or poor. Ratings were also high for the quality of teaching across all areas but were particularly strong for craft-based training programmes with 69 per cent of ex-trainees rating teaching quality excellent. Second, outcome data show positive rates of progression to employment. During the first month after completing their training programme, 55 per cent of ex-trainees were without paid work, with only 43 per cent in jobs. But after 18 months the proportion of those working had risen to 50 per cent while the proportion out of work had fallen to 41 per cent. The report notes that a minority of trainees (2 per cent) went straight in to further training or education after completing their training programme. This proportion jumped to 9 per cent after 18 months, with a sharp increase six months after completing their training programme. This was because some trainees had to wait for six months before being allowed onto their next chosen training programme. (This is the only reference we found in the literature to administrative impediments to further training).

Specialised training provision is also a feature of vocational training for people with disabilities in Ireland, and as we noted earlier, such provision operates under the remit of FÁS. An assessment of this training (WRC, 2006)** found specialist training providers succeeded in delivering the following:

longer duration in training

- numeracy and/or literacy training for learners with an intellectual disability
- low vision training, mobility and braille training for partially sighted or blind learners
- sign language for those with a hearing impairment or who are deaf
- additional assistance during training for people with emotional and/or behavioural difficulties
- trainers who are trained to meet the needs of people with disabilities
- individualised approach to training curricula
- additional support modules, for example personal effectiveness, managing disability, self-advocacy
- work preparation, including extra or different training in job search skills, personal presentation
- additional help for a person with mental health difficulties in managing his/her mediations or learning to manage personal finance for a person with an intellectual disability, travel.

The authors state: 'We can conclude that the special training providers have, broadly speaking, been successful in attracting people with disabilities into training and in retaining them in training. Once engaged in training, the trainees are supported as necessary (psychological, guidance, literacy/numeracy, personal effectiveness etc) with a view to successful completion of the training programme. Significant allowances are also made to cover periods of illness without the trainee suffering economic loss due to persistent absence from training. The process and the models in operation appear to reflect what is considered to be good practice in person-centred, flexible provision' (WRC, 2006 p.41)**a. Despite this, however, progression outcomes achieved by special training provider interventions are poor (at the time of the study about 25 per cent). The authors suggest that segregated provision is relatively ineffective for employment and progression as employment outcomes are poor as are those for certification. The report concludes that 'without certification there is practically no chance of employment, other than menial employment' (WRC 2006 p.41)**a.

Apart from suggesting the lack of accreditation, this report does not indicate why progression outcomes were poor but does note that a wide range of factors could contribute. For example, too few supports to provide linkage to the labour market, the relevance and quality of training, or even employer prejudice. These are important considerations in improving employment outcomes from training programmes, including segregated provision. But as we noted earlier, the policy trajectory focuses on supporting inclusion in mainstream training. We now examine some of the research evidence on this.

4.3.2 Mainstream vocational training

Involving people with disabilities in mainstream vocational training is frequently referred to as inclusive vocational training. This concept, it has been noted, is more than simply

training disabled and non-disabled persons in the same place. Inclusive skills training requires that training providers proactively accommodate people with disabilities, modify the learning environment to ensure it is accessible, and offer support so that all can succeed (O'Reilly, 2007). According to Powers (2008)^{xx}, inclusive vocational training is much more effective, sustainable, and possibly better at integrating persons with disabilities into society than is the segregated, institution-based approach.

In Europe most vocational training programs are state-run, or state funded (although considerable provision also exists in the private sector). This has led one commentator to suggest that inclusive vocational training models may take longer to be implemented in mainstream systems which have been confronted with constant downturns and overhauls since the early 1990s (USAID, 2009)^{xx}. According to that report, key elements and practical steps to be considered by policymakers and educators for the design of a community-based (that is, not institutional) inclusive vocational skills training system include:

- The integration of disabled and non-disabled people into one overall system.
- The involvement of disabled people in all aspects of that system, including programme design and development and hiring of disabled people as trainers and teachers in these programmes.
- An environment that eliminates all types of barriers, including psychological.
 Infrastructure, must be designed and built with accessibility for disabled people in mind, and existing facilities will need to be renovated. Accommodations should be made, systems must be accessible to all people, including people who are blind or deaf, and transport must be accessible.
- Teaching methods are adapted and assistive learning devices made available.
- Career guidance is offered so that people with disabilities can make appropriate choices. This includes individualised assessments of student skills and proactive guidance that does not discriminate against people with disabilities.
- A market-driven approach that ensures training quality and maximises employment outcomes and active employer involvement to ensure that skills are developed in line with their needs.
- Recognition of the importance of cultivating positive attitudes including those
 of non-disabled students and staff to ensure a welcoming and supportive
 atmosphere.
- A teaching/training staff and disability specialist support staff who can adapt instructional methods and techniques to ensure that all students, including those with disabilities, develop the vocational competencies they need.
- Adequate resources to support the training of all types of students.
- Adequate preparation of people with disabilities to ensure they succeed in vocational training. This includes children with disabilities attending schools and succeeding in their basic education and building linkages between secondary schools and vocational education systems.

The report also identified the elements needed for inclusive vocational training institutions (see Box 7).

Box 7: Elements of inclusive vocational training institutions

- A clear policy and a strategy for implementation: Vocational training
 institutions need a clear policy that affirms the importance of all trainees
 and ensures that any trainee who may require additional support or
 resources is no less valued.
- An inclusive curriculum: A curriculum needs to be developed that does not
 create additional barriers for the trainee and his/her vocational training
 instructors. It defines the competencies required and should not impose
 unnecessary restrictions on how these competencies are attained.
- 3. Effective, established links between the training institution, family and/or advocate, and community: The support of families, advocates, and the broader community can contribute greatly to the success of vocational training programmes, and vocational training institutions should seek to form partnerships with them to assure that all the needs of the individual are met.
- 4. Adequate skills and knowledge base among the institution's staff: Vocational training instructors need additional skills in assessment, curriculum development and pedagogy. Efforts must be made to provide all institutional staff with basic skills in working with people from diverse vulnerable groups. Relevant knowledge, skills and attitudes need to be shared with all institution staff. Employing staff with disabilities or from other vulnerable groups can assist this process and provide good role models.

Source: USAID, 2009xx

Specifically in the European context, a recently published report by EADSNE (EADSNE, 2013) investigated elements of good practice in vocational training for young people with disabilities in 26 countries. It identified the value of multi-disciplinary teams and flexible learner centred approaches 'with regard to planning, goal setting and curriculum design need to be used in the VET learning process, so that the curriculum, pedagogical methods and materials and assessment methods and goals are tailored to individual needs' (EADSNE, 2013 p7)

A practical example of a structured approach to vocational training for people with disabilities is provided by the Bridging Pathways strategy in Australia which we introduced in Chapter 3 (Bridging Pathways, 2000)^{xx}. This had four goals, one of which was to increase numbers of participants with disabilities in vocational training (Opening the Door, as discussed earlier). The second was to improve the learning experience of these participants. This goal has two objectives:

to provide client focused training

 to equip the vocational education and training sector with skills in providing inclusive training.

Indicators of success identified for this goal were as follows:

- pass and completion rates in vocational education and training for people with a disability are the same as for all students
- support for people with a disability respects the dignity of each student
- satisfaction with the training experience is consistent across all categories of student.

To achieve these targets, the strategy envisaged two main interventions. The first is based on providing client-focused training. This involves continually improving the flexibility and responsiveness of vocational education and training products and services available to people with a disability and incorporating disability considerations into delivery to clients in rural/remote areas, those with cultural needs, women and students of all ages.

The second is based on equipping the vocational education and training sector with skills to run inclusive training. This centred on:

- equipping training delivery staff and assessors with skills that assist inclusion of people with disabilities
- building competencies on inclusive workforce practices into relevant training programmes, including the assessors and workplace trainers national training package
- ensuring appropriately skilled specialist learning support staff (disability liaison officers, note-takers, interpreters, tutors are available and resourced to provide support, particularly in rural/remote areas
- including explicit equal employment opportunity and equity outcomes in all training packages (Bridging Pathways, 2000, p23)^{xx}.

An example of provision under this strategy is Australia's Disability Support and Transition Pilot, which is developing a model to offer 50 students additional support to help them finish their courses with a guaranteed place in an employment agency when they do. This pilot project is a collaborative federal/state venture and funds disability employment network providers to assist students and staff in a range of campuses during their vocational training and in the transition to guaranteed work. The anticipated outcome is an evaluated model that can be replicated in other states to improve the participation and completion rates of people with disabilities in vocational training.

An interesting example of inclusive vocational training in Ireland, is the Building Futures Project being implemented by the Irish National Organisation of the Unemployed (INOU) with funding from the Mount Street Trust Employment Initiative (Box 8).

Box 8: Building Futures inclusive training model (Dublin)

Background: The Building Futures project targets unemployed and low skilled individuals at risk of poverty due to unemployment. It trains in peer education to enable participants become trainers and facilitators and to work as such within their own communities. The project is not focused on individuals with disabilities but is open to anyone who can demonstrate an interest and capacity.

Objective: To provide certified training to allow participants to return to work.

Participants: Building Futures has been in operation since 2010. Each year, 15 participants are recruited. To date, about 20 per cent of these have had disabilities including mental health issues, learning disabilities and Aspergers syndrome.

Approach: Building Futures has developed a rigorous pre-enrolment and selection process based on open days, workshops, group work and individual interviews. The objective is to ensure that participants are suited to the course and that it is suited to their needs. Throughout their participation, they have access to ongoing support as needed. This includes personal as well as literacy, IT and financial supports. In addition, pre-progression measures are implemented to support participants to get work in their chosen field or to progress to third level education.

Outcomes: In 2011, all participants completed their course and received accreditation. Twelve of the 15 participants in that year progressed to third level education or directly to employment, including the three participants with disabilities.

Source: Farrell, 2010**b

Overall, the Mount Street initiative aims to develop inclusive labour market services capable of meeting the needs of all participants by providing appropriate support as needed throughout the course. Building Futures has a client-centred approach and provides comprehensive supports, as needed, for all participants. To date, over 20 per cent of those on Building Futures courses have had disabilities, including dyslexia, mental health issues and Aspergers syndrome. They are facilitated to disclose their disabilities and to participate in the course through special assistive technologies, accommodations and guidance. The project's high success rate was attributed to careful pre-recruitment selection practices, ongoing support tailored to individual needs, and measures to link participants into employment (Farrell, 2010, p5)**b.

4.3.3 On-the-job vocational training model

On-the-job training is closely related to supported employment – which is vast in its own right (Bayer & Robinson, 2009**; ILO, 2011*X) and beyond the scope of this review to delve into that literature. At the risk of oversimplification, however, we can say that supported employment can be:

a form of employment per se

- provide a location and opportunity for training
- · act as a transition mechanism to competitive employment.

Thus in discussing the relevance of on-the-job training we are aware that this may, in certain circumstances, be considered a form of supported employment. More generally though, it tends to be referred to as on-the-job training or the place-then-train model.

The former model has been defined as a carefully planned, on-the-job process that builds performance capability, especially for workers entering new jobs (ILO, 2011)^{xx}. It requires an appropriate work environment, careful selection, training and support of experienced workers for training roles, and support materials for learning and testing (ibid). On-the-job training is being used more frequently with persons with disabilities (ILO, 2006a)^{xx} so that they acquire the specific skills required to perform a job for which they have been placed. Such schemes may be financed by the government or by private companies interested in hiring persons with disabilities as part of their social commitment. This model has been described as demanding at the analysis, design and development stages (ILO 2006a)^{xx}, however, the benefits are many when it comes to ensuring the successful acquisition of work-related and work-specific skills needed to maintain one's employment (ibid).

The central characteristics of a well-defined on-the-job programme have been identified by the ILO (2011)^{xx} as:

- learning takes place at the work site
- detailed training plans, including task analyses of how the job is performed that guide the training process
- an instructor and/or job coach who is knowledgeable about how to perform the job and all of its corresponding tasks and who guides the training process
- availability of support materials (tools and equipment) during the training process
- well-structured integration of the entire process so that trial-and-error with corrective feedback is included. In other words, the system is comprehensive and unified.

In the learning process, the trainee observes and practises a specific work-related task under the supervision of an experienced trainer/job coach. All tasks are performed repeatedly until the trainee has demonstrated an ability to perform them independently at an established level of criteria. During acquisition/learning, the trainer/job coach gives feedback so that the task is mastered. The task acquisition process follows a systematic process that includes such components as:

- identification of the job-related tasks to be mastered
- identification of the personnel who will assume the tasks of providing the on-the-job training at the work site
- preparation of the task analyses for the identified job-related tasks and the data collection forms used in training
- provision of on-site training based on the principles of systematic instruction

- facilitation of the transition to natural support systems to reinforce the independent work performance of the trainee/employee
- evaluation and improvement of on-the-job training content and processes.

The benefits of this approach have been identified as reduced learning time, reduced training costs, acquisition of work-site specific skills, higher learning rate on job specific tasks, heightened new worker job confidence, and the building of positive relationships between new and experienced workers at the work site (ILO, 2011)^{xx}.

In Australia the place-then-train model is widely used for people with disability. There, it involves careful job matching, individualised marketing (finding the right job with the right employer in the right location for that job seeker), intensive on-the-job support (implementing powerful training technologies and utilising natural supports inside and outside the workplace, and long term follow-up with the worker).

4.3.4 Apprenticeships

Apprenticeships are also a form of on-the-job training and provided a traditional method of developing individual vocational skills for many years. Legislation usually regulates the modern apprenticeship and stipulates training period duration, training format, working/training hours, payment rate and so on (ILO, 2006b)^{xx}. According to the ILO (2006b)^{xx}, the apprenticeship approach to skills training has important implications for persons with disabilities who are interested in learning in a community-based environment the technical, social, and entrepreneurial skills that one may need to transition successfully into open, competitive employment. Apprenticeship training has been provided for those with disabilities and has also been piloted by international agencies such as the ILO and UNDP, as well as with NGOs (Poyhonen, 2004).

The Australian context has shown that apprentices and trainees with disability are as likely as their peers to be employed after successfully completing their courses. Lewis *et al* (2011a)*** explored the impact of apprenticeships and traineeships on employment outcomes for (mostly) young people with disabilities in Australia. An apprenticeship takes on average three to four years to complete while a traineeship takes on average one year. They compared the outcomes for 89 people who had completed an apprenticeship or traineeship with 84 who started but did not finish and a control group of 173 participants who took no programme. They found that undertaking and completing apprenticeships/traineeships led to successful outcomes and suggested that while in training, apprentices and trainees learn a vocation, are exposed to workplace expectations, fulfil a valued social role as a worker, establish social relationships with co-workers and obtain a nationally recognised qualification on successful completion of their course (Lewis *et al* 2011a: p115)***. The same study found formal relationships between disability employment services, vocational training providers and industry groups were central to the initiative's success.

The authors identify the three discrete processes involved in placing and supporting apprentices and trainees with disability to complete their courses:

 recruiting candidates and matching them to suitable apprenticeships and traineeships

- placing participants in the right apprenticeship or traineeship with the right employer and/or host employer
- supporting apprentices and trainees on-site and off-site for the duration of their courses.

As noted at the outset, the literature on vocational training tends to prioritise overarching systems or strategies rather than specific interventions, measures or supports. An additional issue is the limited monitoring of outcomes and the resulting limited availability of data. Moreover, no consensus exists as yet (despite ongoing work in this area) on indicators that should be used in identifying outcomes and impacts. Evans-Klock (2007)^{xx} recently identified the type of further research that will be needed to identify benchmarks required in vocational training. The type of information that needs to be gathered includes:

- Training institutions developing a written strategy on inclusive vocational training, and how 'inclusion' is defined.
- Changes, if any, made to the training centre rules and procedures to facilitate the attendance of people with disabilities.
- What introduction training and on-going support has been provided for training centre management, instructors and other staff, to ensure adequate preparation for the introduction of an inclusive approach.
- Efforts to improve accessibility of training institutions, inside and out, and to make information available in accessible format.
- The question of costs is inevitable in any country: Does the introduction of an inclusive approach involve additional costs, and if so, how are these funded?
- What role do the former special training centres for persons with disabilities now play?

According to Evans-Klock (2007)^{xx} much could be learned from comparable information on these and other aspects of vocational training institutions, and from systematically gathered information on the effectiveness of these centres in catering for disabled trainees in terms of successful completion and subsequent career path.

4.4 Supporting Participation in Vocational Rehabilitation

In an earlier chapter where we provided definitions of the key terms looked at in this review, we noted that 'vocational rehabilitation' is widely used to refer to very different forms of provision. In some cases, it is used as synonymous with vocational training; in others it implies a social provision reflected in day care facilities. Here, however, we use it to refer to case managed, multi-disciplinary interventions for individuals with disabilities, frequently acquired disabilities. Recently, this approach has come to be called disability management (WHO, 2011)^{xx}. The social context for vocational rehabilitation is worth noting. As populations age, the rate and severity of chronic disease and illness (for example diabetes) increases. At the same time, medical improvements mean more

individuals survive trauma (such as spinal or brain injuries) and have a life expectancy on a par with the average, putting considerable strain on health care systems.

Vocational rehabilitation, understood in this way, is intrinsically linked to welfare entitlements and as a policy issue is coming increasingly to the fore in many countries. Vocational rehabilitation is particularly extensive in the US and in Canada where it has a long history and where specialised approaches and occupations have grown up as a result of the extensive practice there. It is also being implemented in EU countries including the UK. In OECD countries, however, an insufficient investment in rehabilitation and employment measures has been noted along with low take-up (ILO, 2011: p122)^{xx}.

The objective of vocational rehabilitation is a return to gainful employment and thus as noted it is usually targeted at those with acquired disabilities who have already been in the workforce. There is a hierarchy of outcomes, the most desirable of which is a return to the original, but perhaps modified, work. If this is not possible, the person may be able to return to the same workplace in a different capacity. Finally, they may need to apply for different work when their current skills and abilities do not match the previous role's requirements. Vocational rehabilitation is by its nature a segregated provision, focused on the individual and responsive to their needs.

The main elements of disability management or vocational rehabilitation are generally:

- A multi-professional approach which may involve psychology, rehabilitation counselling, social work and special education and medicine. Studies have shown that multi-disciplinary treatments more effective in ensuring a return to work (Chamberlain et al, 2009)***.
- Effective case management ideally by 'qualified rehabilitation personnel'. The role of the case manager is to co-ordinate and oversee the early stages of recovery from illness or injury and the overall programme of rehabilitation and return-to-work activities (Elliott & Leung, 2004***; Germundsson et al, 2011)***a.
- Counselling is integral to vocational rehabilitation and may be delivered by personnel such as a job coach, an employment specialist or a rehabilitation counsellor (Elliott & Leung, 2004)***.
- Consumer choice is also desirable in vocational rehabilitation and it has been seen
 as essential that service providers form partnerships that recognise individual choice
 and address specific individual concerns (Elliott, 2002).
- Training in technical skills is another of the programmes which may also concentrate
 on improving trainee self-confidence and raising awareness of the wider business
 environment. Education has also been shown to be an important element of
 vocational rehabilitation (Chamberlain et al 2009)***.
- Workplace supports such as job coaching or workplace supervision should also be available (Chamberlain et al, 2009)***.

There are many models of vocational rehabilitation (Chamberlain *et al* 2009)*** but in general, it involves a sequential and interrelated set of co-ordinated activities (Elliott & Leung 2004)***. Upon referral, a client is screened and evaluated for eligibility and appropriateness. The services to be provided will be determined by the severity of the

disability, the applicant's prior psychosocial and legal history, and availability of funds. After the assessment, the necessary interventions focus on diminishing the limitations and restrictions identified. Ideally, this kind of information would best be used in the context of the local job market and with some knowledge of job analysis, worksite accommodation or modification and job skills training. Rehabilitation counsellors are also frequently involved with employers and other job placement activities (Elliott & Leung, 2004)***.

While vocational rehabilitation is most extensive and developed in North America, it is increasingly being adapted in the EU. In Germany, for example, the onus is on the employer to draw up a plan for disability management when the employee is absent from work for more than six weeks. In Sweden too, employers are responsible for part of vocational rehabilitation such as testing working capacity, work training, transfer to another post, changes in work tasks or working hours.

In the UK the Pathways to Work initiative provided support in employment and health for people claiming the Employment and Support Allowance. It consisted of mandatory work-related interviews and services to help disabled people and those with health conditions move into work. Personal advisers offered help in finding jobs, work-related training, and assistance in managing disabilities or health conditions. Research with a sample of beneficiaries found the programme increased the probability of being employed by 7.4 per cent (WHO, 2011 p245^{xx}). A voluntary component of Pathways to Work was the Condition Management Programme (CMP), which helped individuals manage health conditions better in relation to a return to work. CMPs were short community-based interventions delivered by a team of managers, healthcare professionals and support staff. An early evaluation suggested they were a valuable dimension of the vocational rehabilitation programme (Waddell & Aylward, 2005).

Chapter 5 examines some outcomes of vocational rehabilitation which suggest that it can be effective at least for some categories of disability. However according to the World Health Organisation, despite some promising initiatives, evaluation of the approach is difficult and, in general, its effects are still largely unknown (WHO 2011)^{xx}.

4.5 Discussion

The literature review suggests that a wide and diverse range of practices exists to support students with disabilities in higher and further education. Moreover, there appear to be common approaches across jurisdictions. Across the services on offer, the literature focuses on disability services, self-determination programmes, accommodations and differentiated assessment (all of which tend to be targeted at individuals) and the use of ICTs and universal design which focus on institutions or systems (we note that assessments can be at individual and system levels). Specific issues raised on higher and further education are:

 While there is a great deal of developing and established practice in place to support students with disabilities in higher and further education there is no single solution to meeting the diverse range of needs.

- In this context, careful monitoring is required to ensure that measures continue to evolve to respond to student needs and to ensure that all impairments can be catered for.
- Consultation with students about what works and about increasing choice is shown to be effective in improving supports.
- Legislation is important, but so too is ensuring that relevant staff are aware of their responsibilities under legislation and are trained to provide good practice that meets these responsibilities.

Table 11. Examples of effective interventions in supporting participation

Sector	Intervention	Evidence Base	Key Factors Associated with Success	Sources
Higher education	Self-determination	Critical mass US	Mentoring Skills to self- direct	Brown <i>et al</i> , 2010*** Stumbo <i>et al</i> , 2010*** Izzo <i>et al</i> , 2012***
Higher education	Universal design in learning	Critical mass US	Teacher training	McGuire, 2011** ^b Roberts <i>et al</i> , 2011** ^b Schelly <i>et al</i> , 2000*
Higher education	Auditing of courses and curricula	Single intervention UK	Staff involvement in auditing Focus on practical issues	Tinklin et al, 2004** ^a
Vocational training	Inclusive apprenticeship training	Single intervention Australia	Removal of barriers Ongoing support	Lewis <i>et al</i> , 2011a*** Lewis <i>et al</i> , 2011b***

Within the literature reviewed here, training in self-determination for students with disabilities appears to be effective in supporting participation and retention. Self-determination in the context of participation, as we noted, is frequently referred to as self-advocacy and key to its effectiveness is that it enables students with disabilities to advocate on their own behalf and to be better able to negotiate accommodations and other supports. As is the case with self-determination in transition, self-advocacy programmes can also be delivered through a variety of models. In higher education settings in the US, several approaches are in place but research suggests they are invariably rated as very effective by those who participate in them. One frequently used mechanism is mentoring (which in itself can be delivered in a variety of ways). A slightly different approach to the delivery of self-determination is discussed in more detail in the case studies in Chapter 6.

The literature review also covered universal design in learning or instruction, and as noted this focuses on instruction and assessment per se. Despite indications of the effectiveness of such interventions – particularly in relation to teacher training – the literature notes that a robust evidence base has yet to be developed in this area.

Nonetheless, research findings are encouraging and suggest that even minimal training in the principles and practice of UDL can be beneficial for the classroom experience of all students, including those with disabilities. An important caveat is the need to balance system-wide interventions remains, based on UDL with specific measures targeted at individual student need.

An interesting example of the latter approach (balancing institution-wide approaches with more targeted measures) was provided by the UK's Teachability project (discussed in more detail in Chapter 6). Although a single intervention, it has been delivered in a significant number of universities and merits attention here. Teachability was based on the principle of involving those who deliver university courses to ensure they are accessible to all students. Thus, resources were developed for this purpose, training was provided and faculty staff were facilitated to audit and amend their own courses and curricula.

An explicit focus of Teachability was also to ensure that this broad approach was paralleled by measures targeted at specific students with specific impairments.

The review also examined the information available on disability support services, accommodations and differentiated assessments. Within the current myriad approaches to implementing these supports, no single approach or intervention was identified as demonstrating greater effectiveness than another. Some findings are worth reiterating. First, the literature indicates that such services must be well resourced, focused on supporting retention and capable of integrating students with disabilities into the general student body – that is addressing their social as well as the educational needs. The literature suggests mixed outcomes on accommodations and differentiated assessments. For students to consider these effective, they must be developed and implemented in consultation with students, appropriate training should be provided for staff involved in implementing them, and their implementation and impact need to be monitored. The literature highlights the importance of staff in ensuring the effective implementation of interventions. Training in practical application of support measures and in the legal requirements underpinning them has been shown to be essential in ensuring that effective support is provided to students with disabilities.

In vocational training, we again refer to the Australian project to include people with disabilities in inclusive vocational training. This was one of the few examples we found of a specific intervention (rather than a broad strategy) in this area. Its success was largely due to the fact that all obstacles to participation in training encountered by people with disabilities were identified and removed, within the training environment and the associated work environment. Ongoing support for participants throughout their training was also a contributing factor.

Among other approaches garnering favourable attention in the literature are those involving a market-driven approach based on real trends and opportunities in the labour market and which incorporate:

- the provision of vocational guidance to participants
- appropriate labour market service provision, frequently provided by specialised providers

- a role for disability organisations in supporting participation
- links to employers and to the labour market.

The relevance of developing links between schools and vocational education providers is also noted in the literature. More generally, within the context of vocational training, many reports, particularly those of international organisations, highlight the need for policy and system changes to support inclusiveness and effective vocational training strategies. This presents the same challenge as noted above for higher and further education: that of balancing system level adaptations with ensuring adequate support for individual needs.

Some apparent gaps in the literature are worth noting. These relate primarily to vocational guidance as a mechanism to support retention and the relevance of consumer choice. The former pertains primarily to the education sector, the latter to vocational training. At the moment it appears that students with disabilities have considerable choice when selecting higher and further education courses, but do not always have access to high quality career guidance to enable them focus on specific career choices during their participation (guidance at the point of progression is looked at in the following chapter). Vocational training, however, appears in general to offer less choice to participants with disabilities, although they may have greater access to guidance.

We also refer to an additional issue: lack of attention within the literature to other pertinent characteristics of adults with disabilities, other than the disabilities themselves. No study reviewed age, race or sexual orientation to identify whether these had additional effects on participation, transition or progression of people with disabilities. Similarly, parental status and the possibility of childcare needs receive almost no attention. This again highlights the literature's primary focus on young people rather than older adults which appears to reflect actual provision.

5 What Works in Facilitating Progression from Higher, Further, Continuing and Adult Education, Vocational Training and Vocational Rehabilitation?

5.1 Introduction

In this final data chapter, we examine the literature on what enables adults with disabilities to attain positive outcomes from higher and further education, vocational training and rehabilitation programmes. Table 12 reproduces the elements of this from the conceptual framework. No literature on progression from adult or continuing education was found and more generally, the balance is in vocational training with little pertaining to higher or further education. This is the opposite of the situation for measures to support access to higher and further education and vocational training (as discussed in Chapter 3) and to support participation (discussed in Chapter 4). As a result, much of the literature focuses on progression to employment rather than to higher or further education.

Table 12. Examples of measures to support progression from education and training

Stage in Student Journey	Examples of Interventions at Student Level	Examples of Interventions at Institution Level	Indicators
Progression	Career planning Guidance Work placements	Progression programmes Formal links to	Progress to education/training Progression to employment Retention/return to
	,	employers	employment

In the following sections we review the material on progression measures. As with previous chapters we first discuss this in relation to progression from higher education and further education. The second section examines literature on progression from vocational training and vocational rehabilitation.

5.2 Measures to Support Progression from Higher Education and Further Education

We note at the outset the marked inconsistency between the extensive efforts to support students (particularly school leavers) moving into higher and further education and the much more limited evidence of interventions to support progression as programmes end. This appears to prevail across all countries reviewed, although only the UK literature comments on it. For example, in their extensive review of practice to support the participation of students with disabilities in higher and further educational institutions in England and Wales (CDS, 2009)***^a the authors commented on the lack of supports for transition to post-graduate level: 'When reviewing the attention being given to needs and barriers along the pathways and trajectories of students, the research team found references to holistic approaches and "joined up" activities, but might perhaps have hoped for more. Relatively little was mentioned about assisting or developing

effective exit (or postgraduate) strategies. The limited amount of commentary offered on transition to postgraduate level might reflect various factors, including the stance on disability of external funders' (CDS, 2009: p136)**^a.

Other studies also highlight the lack of – and need for – progression supports for students. McEachern (2007) (cited in Vickerman & Blundell 2010)***a notes that disabled students are often unprepared to handle the transition from school and/or college into work, often lacking direction and knowledge of the world of work and/or the barriers and challenges they might face. This writer further suggests that academic staff should be proactive in their counselling interventions and include career exploration, confronting barriers to employment, job search processes and other transitional challenges as a central aspect of actively supporting disabled students. McIlveen *et al* (2005) supported this view, suggesting that higher education institutions should develop strategies to support transition from a range of phases within the academic life cycle to ensure these barriers are addressed at the earliest opportunity (cited in Vickerman & Blundell, 2010: p29)***a

Similarly, Kaehne and Beyer (2009) noted the limited efforts to support people with intellectual disabilities to progress from further education to employment despite the considerable efforts undertaken to attract them in the first place. They write: 'Poor throughput into employment after further education by people with learning disabilities may also be affected by there being no statutory process in place for young people leaving further education colleges. While UK legislation requires education authorities to arrange review meetings which provide the framework for transition planning in the last year of school attendance, no such framework exists for those leaving further education colleges later in life' (Kaehne and Beyer 2009 p139) **a. This means that young people with learning disabilities leaving further education often end up being referred to day centres or yet more further education courses (ibid).

It is also worth noting that few studies define what positive outcomes are. An exception is the US Rehabilitation Services Administration which through the Final Regulations for State VR Services Programme (2001) defines a successful employment outcome as entering or retaining full-time, or if appropriate, part-time competitive employment, supported employment or any other type of employment in an integrated setting for a minimum of 90 consecutive days. Chamberlain *et al* (2009)*** add voluntary work to this list. We found no literature which defined positive outcomes for progression to higher or further education.

In the following sections, two approaches to supporting students with disabilities in this context are examined. These are:

- developing career focused self-efficacy through mentoring programmes
- building direct linkages from higher and further education to the labour market.

5.2.1 Mentoring to promote career-focused self-efficacy

The concept of career-focused self-efficacy is closely linked to that of self-determination and self-advocacy discussed in previous chapters. In fact, Devlin (2011)**^b argues that self-efficacy pre-supposes self-determination. We noted in Chapters 3 and 4 that self-

determination and self-advocacy are important in equipping students with disabilities to access and remain in higher or further education or training. Research has also identified career focused self-efficacy as a positive factor in contributing to progression to employment (Madaus et al, 2003; Kaehne & Beyer, 2009)***a. CDS (2009)***a state that self-efficacy involves goal setting and the ability to reframe the disability in a positive manner. These authors also note that successful disabled people understood their strengths and weaknesses and could clearly describe them to others. They also believed that they had the power to control their own lives and were flexible enough to capitalise on opportunities when they arose. Less successful people were more passive. Madaus et al (2008) also found that self-efficacy improved their job satisfaction.

As with self-advocacy training, career efficacy is frequently supported by mentoring programmes. Research studies suggest they are effective in contributing to positive outcomes from higher and further education. Noonan *et al* (2004)*** conducted indepth, semi-structured interviews with 17 women with physical and sensory disabilities on their career paths, influences, role models etc. The objective was to identify the factors that contributed to the women's successful career experiences. The interviewees stressed the importance of role models and mentors and described the latter as giving direction, guidance and advice. Burgstahler (2001)*** has written extensively on a mentoring programme delivered by the University of Washington's DO-IT (Disabilities, Opportunities, Internetworking, and Technology) Programme. Implemented over three years, it was intended to increase the career readiness of students with disabilities in pre-college and college settings. It involved a collaboration of employers, college staff, parents, mentors, educators and community-organisation leaders. The outcomes indicated that participants experienced a positive change in their motivation to work towards a career and an increase in the skills needed in the workplace.

Burgstahler and Crawford (2007)*** also noted the impact of a DO-IT programme. In this study participants indicated that it helped them to prepare for employment, increased their awareness of career options and enabled them to develop career skills. This was also one of the few studies to undertake a gender analysis of the data which revealed that the perceived career options of female participants increased significantly more than those for male participants (Burgstahler & Crawford 2007)***.

Stumbo *et al* (2010)*** report on another mentoring programme, called EAST, which supports individuals with disabilities in science, technology, engineering and maths (STEM) courses. Since 2003 EAST has awarded 32 undergraduate research fellowships which help to recruit and sustain undergraduates with disabilities in STEM fields. Staff mentor the students during their participation, which is focused on research thus ensuring they have experience of relevance to employers. Generally speaking, EAST students experience success in postsecondary education and employment in STEM fields. Stumbo *et al* (2010)*** in noting successful outcomes from the programme find 33 per cent of the 32 EAST students who graduated from a four-year college course went to graduate school. In addition, 67 per cent of an unspecified number of respondents to EAST surveys had work at the time of the survey; 38 per cent of these held science-related positions, with a similar proportion in technology; 26 per cent worked in

education. When asked, EAST students indicated that mentoring was valuable in preparing them for college/employment.

5.2.2 Linkage to employment

The EAST programme explicitly attempts to make links to the workplace by ensuring that study content, particularly the research element, is relevant to employers. The value of direct linkage to employment was also demonstrated by Flannery *et al* (2008)***. Their study reports on a demonstration project in the state of Oregon which involved collaboration between community colleges, the Office of Vocational Rehabilitation, local high schools, the University of Oregon and local employers. The programme supplied opportunities for individuals to learn marketable job skills in areas with no formal degree option at the college. The types of appropriate skill areas included occupations such as wastewater treatment, auto-body repair, clerical support staff, surgical tools technician and veterinary assistant. It also included vocational guidance. The study showed that participants who received vocational guidance along with their training were more likely to enter employment in their target area and more likely to earn higher wages than those who had not participated.

The link to employment is also highlighted in the review of the potential of information communications technology (ICT) to support training and education (UNESCO, 2011)

xx. It references a Belgian project which has developed several tools to help students with autism or autistic spectrum disorders in their transition from education to work, or workplace training settings. One such tool is the wai-pass – specific e-portfolio software. This e-portfolio gives information on the skills and competences of a particular student, as well as about his/her behaviour in certain settings and situations. Teachers this relevant information throughout the student's school career – and it often vanishes when they leave school. This tool allows information to be easily retained and disclosed to (potential) employers (UNESCO, 2011)^{xx}.

Some examples of this approach can be found in the Irish context. AHEAD delivers a programme called WAM (Willing Able Mentoring) with funding from the Department of Social Protection. Its objective is to promote access to the Irish labour market for graduates with disabilities. WAM is essentially a partnership of employers and other key organisations which co-operate in identifying and tackling the barriers and challenges facing graduates with disabilities in gaining employment. Through WAM these graduates are helped to secure paid mentored work placements from participating employers. These offer real life work settings and help to identify the issues facing employers and graduates in recruitment and retention of people with disabilities. Since 2006, WAM has placed over 150 graduates with disabilities in its network of employers (AHEAD, 2009).

5.3 Measures to Support Progression from Vocational Training

Although somewhat more extensive than that relating to higher and further education, literature on measures to support the progression of disabled people from vocational training to employment or to further training opportunities is nonetheless limited. Examples, however, suggested effective measures to enable disabled participants

progressing from vocational training programmes to find and retain employment. These include:

- progression supports linked to training programmes
- disabled employment services
- · employment trial models.

5.3.1 Progression supports linked to training programmes

Several studies discuss progress supports linked to training programmes. In its identification of good practice for vocational training, the European Agency for Special Needs Education (EADSNE) suggested the following requirements for the transition to work:

- The school/VET institution needs to establish and maintain resilient connections
 with local employers over time. These are based on companies' growing confidence
 that they receive adequate support whenever they need it during the process.
- The transition from education to employment needs to be backed up by adequate support during the transition phase. Career counsellors/officers need to inform learners about employment possibilities, support them with job applications, inform and support employers and facilitate contact between both parties.
- To have a successful transition phase leading to sustainable jobs in the open labour market, follow-up activities need to be undertaken by competent staff for as long as required, to meet the needs of young graduates and employers.

Hillier *et al* (2007)*** provide a detailed description and evaluation of a vocational support programme for adults with autism spectrum disorders (ASD).

- Participants received employment pre-placement services in order to get a job.
 These services included instruction in job search skills and help in identifying appropriate job adverts using internet searches, company websites, and in newspapers. This helped participants interpret job ads, understand what the jobs might involve, and figure out whether they were under- or overqualified for particular positions.
- Advice on and help with preparing resumes, favourably completing job application forms, and creating positive impressions in job interviews were also provided.
 Participants practised completing application forms and were counselled about what to include, exclude, and how to describe previous work experiences as favourably as possible.
- Mock job interviews were videotaped so they could later review their performance with the programme co-ordinator (Hillier et al 2007) ***.

These skills were taught one on one, and support continued until an appropriate job was found, which took from one to eight months. Once a potential position was found, the programme co-ordinator conducted a job site evaluation using a checklist that covered the work environment (noise level, crowding, type of equipment used), other employees, potential support systems (including previous experience in working with individuals with disabilities), and the tasks to be completed by the individual.

If necessary, the co-ordinator engaged in job development with the employer and negotiated changes to the post's required tasks. Once the participant began the job, the programme co-ordinator accompanied them to work and provided on-site job coaching support as well as ensuring that they understood the tasks and could complete them to the satisfaction of their supervisor and understood workplace rules. Hillier *et al* followed all nine participants through two years of the programme and identified positive outcomes, although the small number of participants must be noted. Increases in employment rates and income were found for participants, and seven retained their initial job placements through the two-year period. Employers also rated participants highly on a range of important job skills.

Devlin (2011)**^b describes a tool and process, the self-determined career model, which aims to develop self-determination and improve work performance. It involves the person with disabilities setting goals and then working with a trainer to achieve them. The tool measures performance before and after training. Devlin describes a test of this method on men with mild to moderate intellectual disabilities working as janitors which indicated the process was effective. All participants achieved their self-selected goals at levels that exceeded the expectations of the supervisor and job coach. However, the author notes that the tiny sample size (four people) means this method would need further testing with a larger group of people with a wider array of disabilities and types of employment.

Lewis et al (2011a)*** highlighted the importance of post-placement support, that is supports for the participant after securing employment. Their study found these included preparing the supervisor and co-workers for the new employee, dealing with their concerns, recruiting their support to provide the necessary instruction and guidance to the employee, becoming familiar with the tasks the employee was expected to perform, arranging any needed workplace modifications and/or equipment aids and assisting with the apprentice skill acquisition and general performance when required.

5.3.2 Disability employment services

The interventions noted above are embedded in training provision. A different approach is supply of employment services by an external agency, frequently a specialist dealing only with individuals with disabilities. Frequently, this model involves a collaboration between the employment agency and local employers. In relation to placing in employment people with disability who have completed an apprenticeship, Lewis *et al* (2011b)*** note the following role for specialist disability employment services (DES): 'The DES also has a unique contribution to make in promoting candidates with disability to prospective employers. Other intermediaries, such as generic job placement agencies, will usually provide a prospective employer with several candidates and leave the final decision to the employer. If one of the candidates has a disability, the chances are small that he/she will be the candidate selected by the employer. The DES will (or should) encourage a partner agency to go forward with only the candidate with disability and make the case to the employer. The DES will also be more mindful of the fit between the candidate and the prospective employer from the perspective of suitability of the work

environment as well as proximity to home and transport between job sites or training venues. (Lewis *et al*, 2011b: p187)***.

In 2000 in the US, the Workforce Investment Act brought together various federal job training and employment programmes to create one comprehensive employment service system. Job seekers, including those with disabilities, can access this system through a network of one-stop career centres (one stop shops). This is a multi-agency model and the public Vocational Rehabilitation Agency, which focuses on disability, is one of the 19 mandated partners. Timmons *et al* (2009)***a sought to investigate how this agency collaborated as a partner in the one-stop system, and how it has affected services for job seekers with disabilities. Their study found that the most effective model for improving service delivery through collaboration was through full-time co-location of a few vocational rehabilitation staff members or full physical collocation of the agencies. However, they stress that physical collocation must be accompanied by integration and partnership in service delivery as opposed to simply serving their own customers alongside each other (Timmons *et al* 2009: p74)***a.

USAID (2009)^{xx} has argued that all community-based vocational skills training service providers complement their services by providing employment-related services, including the following:

- supported employment services for those with disabilities who need the support and presence of a job coach to acquire and maintain job-related skills
- disability awareness training for employers and co-workers at the work site to ensure a supportive work environment is created which will enhance the person's transition into gainful employment
- provision of follow-up services to the person with a disability who has been placed in an open employment position by a job placement officer in order to learn from the employer, co-worker and the disabled worker about how well they are adapting.

More recently there has been a move from a model of job placement that tried to fit people into available job openings to a 'person-centred' model involving the individual's interests and skills. The aim is to find a match that will lead to viable longer term employment and a lifelong career (WHO, 2011)^{xx}. A further recent development identified in the WHO report is the emergence of user-controlled disability employment services including:

- In Manchester, the UK, Breakthrough is an innovative user-controlled employment service for disabled people and employers, helping to find and sustain jobs and to find training for work.
- In South Africa, Disability Employment Concerns was established in 1996 to emulate the ONCE model. Owned by disabled people's organisations, it invests in and supports firms to promote disability employment equity targets.
- In India the National Centre for Promotion of Employment for Disabled People sensitises the corporate world, campaigns for access, promotes education, and raises awareness (WHO, 2011)^{xx}.

These programmes suggest that disabled people's organisations could expand their activities for improving employment to include job search and job matching, training in technology and other job skills, and in interview skills. (WHO 2011)^{xx}.

USAID (2009)^{xx} has also argued that NGOs (non-governmental organisations) and disabled peoples organisations (DPOs) have a role to play in vocational skills training and employment programmes. That report argues: 'However, in order to ensure that the rights of persons with disabilities are recognized, efforts need to continue towards the development of model program and best practices to ensure that persons with disabilities have the opportunity to acquire the knowledge, skills, and attitudes necessary to transition successfully into gainful employment and to become productive and contributing members of their respective communities. More importantly, such efforts need to focus not only on the State systematic level, but also on the community level, enhancing the capacity of NGOs and DPOs to design programmes and drive change' (USAID, 2009 p7)^{xx}.

5.3.2 Employment trial models

Employment trial models may be considered a type of job placement and/or supported employment model. The work/employment trial vocational training model has been defined as work activity that provides experience in, or tests suitability for, a particular job (CRS Australia, 2005). As noted in Chapter 4, in this regard, it may be seen as a form of supported employment. Job placement has been described as an essential component of employment development strategies for people with disabilities, but only a small minority of participants on vocational programmes receive this service (Schneider, 2011). The work/employment trial is an employment opportunity generally supported by government funding which provides a person with a disability with the opportunity to work in an open employment setting with an employer who may or may not agree to provide a permanent employment opportunity at the end of the trial period. Implementing the work/employment trial model helps to reassure employers who may be hesitant about hiring a disabled employee. A probationary period within an employment contract or an employment agreement enables the employer to observe the work performance of the individual and decide whether he or she has the necessary skills, knowledge and attitude required for the job. Ideally, during the work/employment trial, any employer concerns over work performance or productivity are minimised. In cases where regular employment is not secured by the probationary employee at the end of the trial period and the mutually agreed upon contract comes to an end, the person is released and begins to look for another employment opportunity.

In some cases, job placement can occur before students or trainees have completed their course. This approach was included as an example of good practice by the Good Practice in Higher Education report in England and Wales (CDS, 2009)**a. There is evidence that employment rates are higher for young people with learning disabilities who have attended job tasters plus other skills modules that were organised through external supported employment agencies while still at school (Beyer & Kaehne, 2008). These job tasters take the form of time limited work experiences in ordinary jobs and workplaces.

In other instances, the job placement occurs after the training period within the more formal employment trial model.

In Japan, the work/employment trial model is part of a job search and pre-employment process that allows a person with a disability to participate in a trial employment opportunity for a three-month period (JEED, 2008). In essence, a fixed term contract with an employer is drafted and signed; after the person with disability begins to work, his/her performance is monitored and evaluated periodically. During the work/employment trial, a job coach/employment specialist is present at the job site to provide direct, specialised support to the person with disabilities who is undertaking the trial (USAID, 2009)^{xx}.

In Australia, the work/employment trial model for persons with disabilities comprises three different types of trial arrangements (CRS Australia, 2005):

- job sampling for those wishing to sample a job as a learning experience
- job training for those who want a job to develop their skills (similar to on-the-job training discussed in chapter 4)
- job auditioning for people who are ready to work at capacity but need an
 opportunity to demonstrate their abilities when the necessary adaptations and
 supports are in place.

According to the ILO (2011)^{xx}, Ireland has been to the forefront in implementing supported employment as a form of entry to the open labour market. However, McCormick and McRae (2005) have noted that many people with intellectual disabilities working in Dublin supermarkets did not progress beyond entry-level jobs and had no opportunity to move onto jobs of their choice. They emphasised the need for job development and career enhancement through additional on-the-job training. They also raised the possibility that low expectations of employers were placing a ceiling on the potential of people with intellectual disabilities.

With the work/employment trial model, its goal must be determined at the outset because this will establish the nature of the relationship between the employer and trainee. Also, its goal has implications for all conditions to be settled between the employer and the trainee such as eligibility, timeframe and conditions of employment, payment, nature of support, and obligations at the end of the work trial. Again, the purpose of this work/employment trial is to provide the trainee with an opportunity to perform a job in an open, competitive employment setting as well as to give an employer the chance to observe their performance. Selection and job-matching, counselling of both the employee and co-workers, and assistance in adapting the workplace may be necessary.

5.4 Measures to Support Progression from Vocational Rehabilitation

A number of the approaches discussed above involve interagency or multi-agency working both in educational and vocational training contexts. This approach is embedded within vocational rehabilitation programmes, as is a focus on placement services. In effect, a central element of vocational rehabilitation is that it seeks to

place the individual directly into employment and to support them to remain in that employment and multi-agency working is integral to this.

Chamberlain et al (2009)*** have argued that when multi-professional cross-sector teams hold systematic group rehabilitation meetings, the results in terms of work resumption are better than when such meetings do not take place. They also argue that the core rehabilitation team should include all the professionals most commonly needed for assessment and intervention. The wider vocational rehabilitation team should include those who can deliver education and those who represent the other authorities that need to be involved to facilitate return to work. In particular, approaches that involve the participation of employers or have direct links to employers have been highlighted (Lewis et al 2011***, Hillier et al 2007***).

Chamberlain *et al*, (2009)*** identify the roles and responsibilities of each main actor which they suggest will ensure the success of vocational rehabilitation programmes. Table 13 illustrates this.

Table 13. Roles of actors in vocational rehabilitation programmes

Employee Role	Employer Role
Keep in touch with employer	Keep in contact with employee
Openness with occupational health	Ensure understanding of sickness absence policy
Discuss which parts of the job can	ergonomics
be done	Check line managers' understanding
	Facilitate phased return to work
	Accommodate rehabilitation process
Role of social insurance system	Role of health system
Addison and all with the channel to	
Advice on eligibility benefits	Adjust environment/provide equipment
Assess work	Adjust environment/provide equipment Advice on return to work
]	
Assess work	Advice on return to work
Assess work Work experience	Advice on return to work Encourage liaison with employers

Source: Chamberlain et al, 2009***

The US vocational rehabilitation programme is federally funded and designed. But individual states can add innovations and specific elements to enhance the delivery or outcomes. In Oregon for example, vocational rehabilitation developed a model to enhance employment outcomes based on the concept of motivational interviewing. This counselling approach aims to enhance motivation by assisting clients in examining and resolving employment ambivalence. Staff are trained to recognise and target services based on client preparation for employment and to provide enhanced job development services.

These services involve customised job development approaches with employers to find better job matches for clients. This project emerged from a self-assessment that indicated the agency could improve services to people with the most significant

disabilities. It was a comprehensive effort that also engaged community rehabilitation providers and employers.

According to data collected by the Oregon vocational rehabilitation service, 40 counsellors participated in the project. During the four-month training, an additional 113 placements were secured. Cases closed without a successful outcome decreased by 60 in one year: (1,490 unsuccessful closures in 2006-07, compared to 1,550 in 2005-06). This translates into about \$184,500 (€138,600) of service-dollar savings. In 2010, successful closures continued to rise to 1,570. Of those who closed successfully, only 21 did not meet the criteria of having a 'significant disability.'

Throughout the US, research into the effectiveness of vocational rehabilitation programmes shows inconsistencies in outcomes at State level and for different social groups. Timmons *et al* (2002) investigated the characteristics of effective US state service systems by examining the experiences of people with disabilities who used them to find work. They identified five key components for effective service delivery:

- agency culture
- consumer directedness
- access to resources
- quality personnel
- co-ordinated services.

5.5 Discussion

This chapter has examined the limited literature on measures to support the progression of people with disabilities from higher and further education, vocational training and vocational rehabilitation. In general, these measures appear not to be well developed, and while innovation exists it is the exception rather than the rule. Yet it is clear that with adequate supports and measures, disabled people can enjoy positive outcomes and progress to employment. (We note that literature relating to progressing to postgraduate education is particularly limited).

Table 14. Examples of effective interventions to support progression

Sector	Intervention	Evidence Base	Key Factors Associated with Success	Examples of Sources
Higher education and vocational training	Progression supports embedded in training/ education programme Direct links to employers	Several interventions. Multiple sites	Direct link to employers Vocational guidance Practical support with interview preparation	Flannery et al, 2008*** UNESCO, 2011 ^{XX} Hillier et al, 2007***
Vocational training	Disability employment services	Several interventions Multiple sites	Dedicated services Advocacy on behalf of individual Direct link to employers	Lewis <i>et al,</i> 2011b*** Timmons <i>et al,</i> 2009** WHO, 2011 ^{XX}
Vocational rehabilitation	Case managed, client centered approach	Critical mass* US	Per capita funding Career guidance and planning Job placement	Chamberlain et al, 2009*** Elliott and Leung, 2004***

^{*}Sources cited are indicative of critical mass of literature in this area

Among the measures offering evidence of effectiveness, noted in Table 14 above, are:

- Progression supports for participants and students while they are still studying or training. This approach is used in many jurisdictions and involves supporting the student to identify and engage with employment opportunities, and fostering direct links with employers.
- Disability employment services which involve a specific (and in some instances exclusive) focus on people with disabilities and offers they and their employers support subsequent to placement.
- The case management approach which characterises vocational rehabilitation and which is based on identification of needs and the sequential or consequential delivery of services to meet those needs.

Each approach, discussed earlier in this chapter, has a number of common features: vocational guidance, establishing direct linkages to employers and the provision of specific supports and inputs based on individual needs.

Aspects of these approaches are evident but not widespread in the Irish context. One exception is that of vocational rehabilitation. Within this model, which is not implemented in Ireland, direct placement into employment is a core part of the service and individual cases are not closed until this, or a comparable, outcome has been achieved. This model is widespread in many jurisdictions, including all those looked at here. As a result, a considerable body of practice is in place which can continue to inform policy and practice development.

In concluding this chapter, we restate the surprising absence of reference within the literature to welfare traps and their negative impact on outcomes from education and training for people with disabilities. This was addressed at the ILO regional meeting on vocational training where Bogard (2007) argued for the need to acknowledge that social security and allowances are typically considered a safer income than wages or salaries. People fear giving up this security for insecure employment and being fired – resulting in no income. Also, disabled people organisations are often afraid to promote activation towards employment due to concerns that those who do not apply will be penalised by, for example, cuts in their social welfare support.

A second issue receiving almost no attention is the impact of resources on education and training outcomes; it is only in vocational rehabilitation that this is discussed at all. Mwachofi *et al* (2009) highlight the importance of spending and duration: they note that the amount of spending per client on vocational rehabilitation and the duration of intervention increased their likelihood of securing competitive employment. (They also highlight unfavourable outcomes for minorities in this context, as do Burstrom *et al* [2011] in Sweden). Chamberlain *et al* (2009***) also refer to the importance of adequate funding and adequate duration in ensuring effective outcomes from vocational rehabilitation. Together, these points highlight the broader policy context within which education, training and rehabilitation programmes are located.

This broad context was referenced also in the recent World Health Organisation (2011) report. The recommendations, noted below, highlight the need for quality interventions, links to employment, compatible social protections systems and adequate resources:

- make mainstream vocational guidance and training programmes accessible to people with disabilities
- make mainstream employment services available to them on an equal basis with other job seekers
- develop services tailored to individual and community needs, rather than services of a 'one-size-fits-all' nature
- ensure that mainstream social protection programmes include people with disabilities, while at the same time supporting their return to work, and not creating disincentives to those seeking or returning to work
- design safety net interventions to promote labour market inclusion of disabled people by offering assistance and support services or covering the additional costs incurred by those who take up work
- adjust disability assessment systems so they assess the positive aspects of functioning (as opposed to disability) and capacity to work
- monitor and evaluate labour market programmes aimed at facilitating and increasing employment of persons with disabilities and scale up those that deliver results with focus on inclusive, not segregated solutions
- provide adequate and sustainable funding for training programmes to build a skilled workforce of people with disabilities (WHO, 2011, p.268)^{xx}.

What Works in Facilitating Progression from Higher, Further, Continuing and Adult Education, Vocational Training and Vocational Rehabilitation?

As noted in Chapter 3, as measures to support transition to higher and further education for school leavers could be adapted to support adult access to vocational training, so also measures to support progression to employment could be adapted to secure outcomes in further and higher education or vocational training.

6 Case Studies

6.1 Introduction

In this chapter, we present case studies of five interventions or programmes considered relevant to this review's overall concerns. They were identified on the basis of the literature review and provide more detail on their objectives, implementation and outcomes. They relate to:

- A programme of self-determination training provided to high-school students, college students and undergraduates in a US university, with the objective of assisting them to access and complete degree courses in science, technology, engineering and maths (STEM) and to progress to employment in the STEM field.
- The Teachability programme in Scotland which enables higher education institutes to audit and improve the accessibility of their curriculums and teaching practices for students with disabilities.
- Programmes from Alberta, Canada, which enable adults with intellectual disability
 to participate in fully inclusive third level education programmes. Although within
 at the higher education sector, these are also relevant for developing inclusive adult
 education provision.
- 4. A model of inclusive vocational training delivered through a multi-agency approach in Western Australia and which successfully incorporated people with disabilities into traineeships and apprenticeships and secured positive outcomes for them.
- An example of the US's vocational rehabilitation programme which uses a case management approach to deliver individually tailored services for adults with disabilities, including acquired disabilities.

While the review includes other examples of effective measures that could have been presented as case studies, we chose these for the following reasons:

- first, they conform to internationally accepted criteria on good practice which, within the literature, is characterised by being:
 - well grounded in theory
 - supported empirically through studies that are internally and externally valid
 - having some underpinnings in existing literature
 - associated with meaningful outcomes
 - socially valid
- second, they give examples of good practice for all levels of education and training discussed in this review as indicated in Table 15.

Table 15. Overview of case studies and sector

Sector	Case Study	
Higher and further education	Training in self-determination for undergraduates	
Higher and further education	Inclusive education through design	
Adult and continuing education	Third level for people with intellectual disability	
Vocational training	Inclusive vocational training model	
Vocational rehabilitation	Federal vocational rehabilitation programme	

Third, they contain insights into constructive and progressive practice over and above the primary substantive content. They highlight various generic approaches of relevance to the development of practice more generally and include natural and peer support models, case management and effective interagency approaches.

Finally, the case studies have the potential to inform policy development in Ireland. Collectively, they relate to policy areas particularly germane in the Irish context. Some pertain to examples of practice that are relatively close to this country's current system of provision or to ongoing developments within the policy framework. Others, (for example, the US vocational rehabilitation programme) are less proximate to Ireland but resonate with developments in Europe and are therefore relevant in that broader context.

We present each case study in turn noting the context, facilitative policy, interagency models, key actions and outcomes. We also comment on relevance to the Irish context.

6.2 Self-Determination Programme for Disabled Students in Higher and Further Education in the US

This case study examines a self-determination programme administered by a major US midwestern university. Its focus was the development of self-determination skills in the context of transition to higher education programmes and employment in science, technology, engineering and mathematics (STEM).

The project had two dimensions: first, to focus on disabled students in high school/college and support their access to and participation in third level STEM degree courses; second to focus on their progression into employment in the STEM area. The project led to significant outcomes in supporting access and participation and is an example of how an approach, most frequently used in transition services, can transfer to facilitate progress to employment.

An interesting feature is that the programme was delivered through a student learning community (SLC). SLCs vary depending on the context in which they are implemented but, generally speaking, they are defined as a collection of activities organised by common goals that a group of students completes together (Swaner & Brownell, 2008). An important feature of an SLC is that a cohort of participants is created, which serves as an ongoing social support network while working to achieve goals together. These communities are prominent on US college and university campuses because they are seen as cost-effective in providing concentrated and creative learning (Swaner & Brownell, 2008).

Policy/empirical context

The shift towards a knowledge-based economy is a key labour market challenge in the US, as in Ireland, and has increased numbers and skill level of workers in STEM. At the same time, participation levels of students with disabilities in postsecondary STEM education is low. In the US, 2004 figures indicate they accounted for only 7 per cent of graduates in science and engineering (Izzo et al, 2011)*. The perceived difficulty of STEM subjects may be an issue here. For instance, Alston et al, (2002, cited in Izzo et al, 2011)* found parents, teachers and counsellors do not encourage students with disabilities to pursue science and engineering at third level. These challenges should also be considered in relation to wider issues around third level education, especially the research evidence that many of these students do not reach their potential in this environment (Izzo et al, 2011)*.

Self-determination skills have been identified as central in the transition to third level education and for full participation in this educational sector. Self-determination training involves a range of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, and autonomous behaviour (Izzo *et al*, 2011: p3). Relevant skills include self-advocacy, decision-making, problem solving and self-regulation. Self-advocacy is relevant here and refers to the capacity to advocate on one's own behalf to obtain access to accommodations, supports and rights. It may also involve skills in identifying appropriate accommodations, communication and negotiation with services and support providers or learning how to appropriately self-disclose (Kissel, 2006).

Research evidence suggests that self-determination and self-advocacy skills are not sufficiently developed at second level and hence specific interventions in this area are necessary for students with disabilities. In fact, self-advocacy is consistently cited as a core university 'survival skill' (Grigal & Hart, 2010; Kochhar-Bryant, Bassett, & Webb, 2009 – all cited in Izzo et al, 2011)* and a wide variety of literature has identified positive outcomes arising from interventions focused on self-determination and self-advocacy skills. Kissel (2006: p4) describes evidence presented in the literature for the importance of self-determination and self-advocacy as 'overwhelming'.

The intervention which is the subject of this case study sought to ensure that selfdetermination programmes would enable students with disabilities to access, participate in and progress from third level education in the STEM field.

Aims and objectives

The programme's objective was:

- to increase the numbers of students with disabilities entering four-year university
 STEM courses
- to enable them successfully complete the course and acquire degrees
- to enable them to progress to employment in the STEM field.

The project sought to achieve these objectives by developing self-determination, self-advocacy and self-awareness in disabled young people as they left high-school, in two-year colleges of further education and as undergraduates in STEM courses at university.

The aim was to enable these students to develop the necessary skills and to support them in their university and subsequent employment careers. The specific skills provided included awareness of their interests, learning styles, personality traits, strengths and challenges as well as understanding of disability, issues around disclosure and the identification and negotiation of accommodations. Other skills imparted included goal-setting, planning and time management.

Approach

The approach to this self-determination programme was to embed it within a student learning community, which is a focused intervention based on creating a cohort of participants for whom training and other interventions can be delivered. Thus, SLCs combine professional input with peer-to-peer networking and support structure and have been described as 'transition scaffolds' (Izzo *et al*, 2012)***, in the sense that they can underpin provision of supports which facilitate the transition into and from third level education. In this instance, the SLC model provided the mechanisms for skilled professionals to teach self-determination skills directly to high school and college students with disabilities.

Two student learning communities were set up for this project. One, the Beginner SLC, comprised students in high school and two-year colleges. It sought to introduce key skills in study and self-advocacy and to prepare the high school and further education students for transition to university STEM courses. The second SLC, the Advanced SLC, comprised under-/recent graduates and aimed to strengthen their self-advocacy skills and prepare them for transition to employment or internships in the STEM field.

The SCL model supports consisted of three elements:

- Transmission of knowledge and skills in self determination. This was delivered by professionals through structured inputs (see discussion of implementation below).
- Opportunity for hands-on experience for students and the reinforcement of the experience as they acquired technical skills through their participation in STEM course work.
- Creation of peer-support networks. This is a fundamental element of SLCs and occurs
 through mentoring schemes and opportunities for students to discuss disability
 issues with peers. Students who have completed the advanced SLC module act
 as mentors for those in the beginner module. Likewise, STEM professionals act as
 mentors for those in the advanced module. Past participants of the SLC provided
 peer support by conducting field trips, campus tours and panel discussions thus
 facilitating opportunities to share skills as well as further building support networks.

Recruitment of participants

Participants for the Beginner SLC were recruited from high school and pre-degree colleges of further education. Different strategies were used to recruit these participants.

- Project staff participated in various types of transition-focused events which these students would attend, including transition fairs and regional transition council meetings.
- Information letters and applications forms were sent to school principals, guidance counsellors, maths and science teachers and transition co-ordinators in local high schools to inform them of the project. These were followed up by meetings with these personnel.
- Project staff attended and made presentations at recruitment fairs and conferences.
- Some participants were also recruited through referrals from the Department of Disability Services at their local community college.

Participants in the Advanced SLC, which catered for existing undergraduates, were recruited on campus, often through referrals from university disability services or the STEM faculty. Application forms and SLC fliers were also sent to STEM faculty, disability support services personnel and other relevant staff. Recruitment for the Advanced SLC was less challenging because the students were already within the university. A particular challenge, however, was accessing students with disabilities who had not registered with disability support services.

Candidates for all SLCs went through a formal application and interview process. Students submitted applications which contained information on their career goals and interest in STEM disciplines. Once admitted to the SLCs, the students completed an intake process that included face-to-face interviews. These ascertained functional limitations and identified the learning needs, accommodations and supports required. Prior experience of STEM was also discussed along with the students' technological literacy, current coursework, progress in school, and their career goals. Letters of recommendation were also required to verify student interest in STEM careers. This comprehensive recruitment process helped to create a detailed profile of each student so that the SLC content and delivery could be tailored to their individual needs.

During the pilot phase, 83 students were involved, 67 in the Beginner SLC and 16 in the Advanced SLC. Disabilities reported included: attention deficit/hyperactivity disorder (ADHD), specific learning disability, sensory impairments, and autistic spectrum disorder. In the Beginner SLC, ASD was most commonly reported whereas ADHD was most frequently reported in the advanced module.

Implementation

The beginner module can be delivered in two ways: in a residential setting where students stay together throughout the programme (usually four or five days); or it can be delivered weekly, usually 10 weeks of sessions lasting 90-120 minutes. While both methods are delivered on a college campus, the residential setting is considered to allow greater immersion in college life and a greater opportunity for nurturing independence, potential networking with peers and the identification of accommodations. Regardless of the method used, inputs are delivered by: career development specialists, disability services counsellors, assistive technology specialists, and staff from admissions, student life, and financial aid offices.

The Beginner SLC begins with personality, learning style and interest assessments. Self-determination exercises are undertaken which include selecting colleges and STEM majors, applying for college and financial aid, and composing resume and cover letters. Students also gain valuable experience of STEM college work, for example, by undertaking such coursework and attending relevant modules. The latter can include 'mini-courses' which emphasise fun and interactive learning, including challenges such as creating strategy video games with software, designing interfaces to enhance human problem solving etc.

At the end of the Beginner SLC students present a personalised self-advocacy plan and transition portfolio. This details their personality and learning styles and objectives for postsecondary education or employment. It also includes a self-advocacy component as students must detail how their disability may affect learning and the accommodations they require, especially for challenging STEM content.

The Advanced SLC module takes place in a classroom environment on campus, and again focuses on transition activities with a strong self-determination and self-advocacy component. It involves 90-120 minute sessions on a weekly basis over 10 weeks and deepens skills such as goal setting and time management and puts greater focus on transition to employment, for instance resume preparation, interview skills etc. At its conclusion, students prepare a self-advocacy plan and transition portfolio which, emphasises transition from third level education and 'job readiness' skills.

The curriculum's exact content and its mode of delivery are tailored to the instructional needs of students, but generally both Beginner and Advanced SLC curricula focus on these core transition areas:

- Self-awareness: researching interests, learning styles, personality traits, strengths, and challenges.
- Self-determination/self-advocacy: understanding disability, disclosure, and how to negotiate for accommodations.
- Assistive technology (AT): learning about AT assessment, identification, and use.
- Career exploration: matching strengths and interests to potential majors and careers.
- Networking: creating a support network.
- Study skills: learning time management and organisation strategies.
- Setting goals: developing short- and long-range goals.
- Internships and employment: searching, applying for jobs, writing resumes, and interviewee skills.

Self-Advocacy plan and transition portfolio

Both modules involve the production of a self-advocacy plan and transition portfolio containing the sections listed below. Most students indicated these were highly useful elements of the SLCs and they are worth examining in detail. Moreover, the portfolio gives a further indication of how self-determination skills can be nurtured.

Creating a portfolio begins with completion of learning style, personality and skills tests. Through these, students identify and discuss their strengths, talents and weaknesses. They then reflect on different learning styles and discuss the strategies they can adopt. These may include study groups, working with a tutor or using assistive technologies. The skills and strategies most relevant for STEM are emphasised.

These elements foster self-awareness, an essential component of self-advocacy and self-determination, as well as creating a context for discussing learning needs, styles and strategies. This outcome of this phase form the first element of the plan.

The portfolio also involves mechanisms for long-term decision-making and goal setting and these are the second element. Students compare and contrast three potential career choices and develop a detailed account of their preference. They also summarise their long-term goals for STEM majors and employment and then disaggregate these into short-term goals which could be accomplished in weeks.

The third section of the plan relates more specifically to student's individual disabilities and their relevance for learning. This allows students to consider, identify and communicate the specific accommodations they required. During this phase, they also meet with disability counsellors and academic advisors and use these meetings to develop self-advocating.

The final section relates to the student's responsibility and role as a self-advocate. They are asked specifically: how often would they seek to meet counsellors and academic advisors? Would they ask questions in class? Would they record classes or work with study buddies or note-takers? How often would they meet with disability counsellors and instructors? These questions stimulate autonomous thinking and encourage students to recognise their own capacity to determine their approach to learning strategies and to accessing supports.

Outcomes

The research of Izzo et al (2012)*** identified positive outcomes from this intervention and included a series of surveys to identify student perceptions of what works in the SLC modules. These were self-report instruments given to students at the end of each module. One core survey consisted of 75 likert scale questions assessing all elements of the knowledge, experience and benefits which formed the programme's objectives. Self-report surveys specific to each module were also administered. These involved 25 to 40 likert scale items and about six open-ended questions, through which students could communicate criticisms, suggestions or recommendations.

Overall, students reported high levels of satisfaction with the SLC programme, with 84 per cent indicating they would recommend it to a friend. Beginners, in particular, rated the following elements highly: self-advocacy skills, learning about college life, learning about disability campus resources and academic supports and peer-group discussions. Development and awareness of personal responsibility were also highly rated. Participants also reported increased confidence in their transition to university as a result of SLC.

Overall two factors emerged as central to the programme's success: peer-networking and the opportunity to discuss disability with others; and the experience of preparing the self-advocacy plan and transition portfolio. Students thought these different course elements fostered disability self-awareness and disability disclosure skills and, more generally, the ability to function independently (Izzo *et al*, 2011). The study does not report specifically on the impact of the learning to learn modules of the programme.

Access results to third level STEM courses were also positive. Six of the 10 second level students who had graduated subsequent to participation in the Beginner SLC progressed to third level STEM degree programmes. The transition to employment for those participating in the Advanced SLC was similarly positive. Just four of the participants had graduated at the time of the research. Two were in competitive employment in the STEM field while the other two had applied for STEM post-graduate programmes (as of spring 2011).

Given that the construction of peer-support networks is essential to the SLCs model for supporting self-determination, continuing participation is also worth noting. Three quarters (76 per cent) of those second level students who took part in the Beginners SLC modules in 2009 and 2010 continued to be involved in mentoring and alumni capacities after completing it themselves. Likewise, 100 per cent of those who participated in the advanced modules in the same years have remained actively involved in subsequent SLC interventions.

Comment

This case study are an interesting example of an approach to supporting students with disabilities to transfer to STEM courses, complete their participation and progress to employment in that field. This has a dual benefit in that it underpins inclusion for students with disabilities in these growth areas and it helps to address skills shortages. It also helps to break down stereotyping of the types of courses suitable for students with disabilities.

The embedding of the self-determination training within the student learning community is interesting. The approach allows disabled students to participate in inclusive education while also benefiting from specially targeted interventions. Although no information is given on funding, these communities are generally considered to be cost effective since they (a) use peer supports and voluntary mentors as key resources and (b) draw on professional resources already in place within university.

The transmission of self-determination and self-advocacy skills, described here in the context of higher education, has implications for practice beyond this sector. This model, or an adaptation of it, could be considered in other areas where inclusive provision is desired, and particularly for adult and continuing education and vocational training, where considerable challenges remain. Peer support, professional inputs and self-directed planning are all elements that can, with minimum modifications, transfer across different learning environments. The balance between inclusive education and targeted measures evident in this intervention is also worth noting.

6.3 Teachability: Accessibility by Design in Scottish Higher Education

This case study describes the Teachability project initiated by Strathclyde University in Scotland. The project began in 2000 when the Scottish Higher Education Funding Council audited provision for disabled students in its institutes. The Teachability programme was established in Strathclyde to meet these requirements, but went beyond auditing to provide academic staff with the resources and support with which to conduct their own self-audit of provision for disability students. This was achieved by designing a set of publications and training workshops for academic staff. The council, recognising the value of this approach, funded the project for three years to broaden measures to improve access to the curriculum for disabled students and to inform those institutions not already engaged in developmental work. Initially, the Teachability project was developed for five higher education institutions in the west of Scotland but was later extended to 13 additional institutions.

At its heart, Teachability is a pragmatic approach to embedding accessibility in the design of third level education. In this way, the project echoes the concerns of universal design, but can include also a disability-specific dimension. In this case study we first describe the overall method Teachability developed to audit and improve course curricula. We then look at its application in two different contexts. First, we examine its implementation in Moray House School of Education, University of Edinburgh, which is an example of a school wide, indeed university-wide, implementation of this approach. Our second example, in the school of geography and geosciences at St Andrews, demonstrates the value of the Teachability approach particularly in challenging accessibility issues, in this case, field trips.

Policy context

In the UK, the students entering higher education who declared a disability increased by over two-thirds during the 2000-01 and 2005-06 academic years. This occurred in the context of legislation prohibiting discrimination against people with disabilities. The Disability Discrimination Act 1995 (UK) outlawed discrimination against persons with disabilities in employment, health and the provision of goods and services. It stipulates that employers or service providers must make 'reasonable adjustments' for people with disabilities and also requires public bodies to promote equality of opportunity for them. Higher education institutions also have a duty to 'anticipate reasonable adjustments' for students and staff with disabilities. Furthermore, the UK's Quality Assurance Agency for higher education has developed a code of practice for students with disability which reflects the policy context and sets the benchmark for these institutions. This code is informed by a social model of disability and emphasises removal of barriers.

In response to these legislative changes, the Scottish Higher Education Funding Council (known today as the Scottish Funding Council) made funds available for disability services staff at each higher education institution in Scotland. It also began a programme to evaluate provision. As part of this overall funding context, £108,000 (€128,900) was provided for Strathclyde University's Teachability – Access to the Curriculum programme.

Objectives

The overall objective of the Teachability project is to conform with UK legislative requirements by providing curricula that are prepared by and accessible to diverse learners including those with disabilities. The overall approach, therefore, is based on the principles of universal design. However, the concerns of Teachability extend beyond inclusive practice as it recognises that some disabled students will require special consideration to participate on some courses. The project's goal, therefore, is that curricular provision should be informed by knowledge of the generality of disabled students' needs and that when barriers to access persist, creative one-off solutions should be found.

Approach and development of the project

Teachability, as an academic self-audit process, rests on an understanding of key ideas such as 'inclusive teaching practice', 'core course requirements' and a sense of what it is that aids or inhibits access to the curriculum for disabled students. The basic premise is that as academic staff design and deliver courses they are in the best position to develop inclusive practices. Teachability was funded as a three-year project and its development at Strathclyde University had a number of stages.

First, it began with a disability needs assessment of curriculum materials and courses for accessibility in 15 university departments. The assessment was informed by focus groups involving students with disabilities and was conducted by the disability service department. Subsequently, Teachability project staff facilitated one day workshops with faculty to undertake self-audits of the various courses. This was accompanied by a more general analysis of contemporary provision within each pilot department. Key findings of the pilot assessment included that curriculum accessibility varied widely and that this was linked to variations in practices, attitudes and knowledge of academic staff as well as available equipment, technology and other resources and staff.

The second phase of the Teachability project saw the publication of a booklet entitled *Teachability: Creating an Accessible Curriculum for Students with Disabilities* (2000). It provided information and resources for academic staff to facilitate the provision of accessible curricula in their specific study areas.

The third phase saw the publication of other booklets with more specific focus but continuing the theme of curriculum accessibility. These included material on:

- creating accessible lectures, seminars and information on courses
- accessible course design
- creating accessible placements and practical classes
- creating accessible e-learning resources for disabled students
- creating accessible examinations and assessments.

Finally, the programme also developed a recommended process for use of the material and implementation of the Teachability approach. Workshops trained academic staff

in the best use of the booklets. Up to 2007, an estimated 1,000 staff had taken part in Teachability workshops (Williams, 2007).

Implementing Teachability

Teachability essentially (a) undertakes accessibility auditing and (b) embeds accessibility in educational design. This process consists of four steps.

The first step, which underpins the process overall, involves identifying 'core requirements' of each academic course offered by the higher education institution. By identifying what is central to the course, staff are better placed to identify and remove barriers. For instance, academic staff delivering a language course will need to decide whether a core requirement is that students speak the relevant language or if the focus is on communication. If communication, rather than speech, is the desired objective, this opens up a variety of additional possibilities for teaching, learning and assessment (Tinklin *et al*, 2004)**^a.

The second step is an audit of practice in curriculum delivery, taking account of:

- information on the course
- features of the programme of study
- induction procedures
- learning and teaching formats and delivery styles
- practical classes, labs and workshops
- placements, study abroad, and field trips
- information and communication
- assessment.

The audit outcomes lead to identifying actions likely to improve accessibility – the third step in the process. Finally, step four involves putting in place a strategy for implementing these actions. The process, workshops and materials developed by the Teachability programme thus provide a comprehensive approach to embedding accessible design on a variety of levels. To explore further what this involves, we describe two instances of implementation, beginning with Moray House School of Education at the University of Edinburgh.

Moray House School of Education: School-wide Teachability

Moray House School of Education in the University of Edinburgh has implemented a university-wide Teachability review since 2005. In 2007 an internet-based survey revealed high percentages of students with disabilities did not disclose this. This included 22 per cent of those with specific learning disabilities, 46 per cent with unseen/medical conditions and 69 per cent with mental health problems. This data provided further indication of the importance of embedding accessible design across all forms of provision.

The university-wide approach was implemented by requiring that each school review its own provisions and appoint a Teachability officer. Moray House School of Education

conducted a Teachability audit in 2009. In addition to the materials included in Teachability: Creating an Accessible Curriculum for Students with Disabilities, the audit at Moray House was also informed by the Department of Higher and Community Education's report Creating a More Enabling Environment for Disabled Students (Shaw et al, 2005) as well as the UK's Quality Assurance Agency's code of practice for students with disabilities. The following discussion draws on Cebula and McGregor (2009)* which presents a report on auditing.

The Moray House school offers nine undergraduate and 22 postgraduate programmes and these include distance learning and other courses which operate outside mainstream teaching hours. In the 2008-09 academic year 187 students on these programmes had registered a disability with the university's disability office. Most related to specific learning difficulties but students also disclosed sensory, mobility and other disabilities.

The objectives of the audit undertaken at Moray House included:

- to draw together existing school-based teachability work and provide a further opportunity for critical reflection on programme accessibility
- to identify current good practice, and ways these can be shared across the school and beyond
- to identify areas of concern for accessibility, considering ways in which these can be addressed at programme, school or university-level (and any barriers to these concerns).

The process began with the establishment of a Teachability working group at Moray House, which included members from each department, staff with experience of or expertise in the field, the directors of undergraduate and postgraduate studies and two students with disabilities (one undergraduate and one postgraduate). The audit's key component involved focus groups and interviews with staff and students covering all undergraduate and postgraduate degree programmes. Twenty-seven focus groups and eight interviews were conducted and overall 95 members of staff and six students were involved in these. This led to the preparation of a report which was considered by the working group, which then made minor additional suggestions. The audit covered all areas of the school's teaching programmes and interesting issues were raised and suggestions made for improving accessibility. These are noted below.

Accessible websites

The most important element of recruitment and outreach for the school's programmes was the school webpage. The audit found that overall staff felt this improved accessibility by making information on course content and recruitment readily available. A review of relevant web pages was suggested, particularly where would-be-applicants might be concerned about the possibly physically demanding nature of aspects of the course work or placements. This identified a key gap: information on supports for disabled students. While this is supplied to students once they apply to the school, it had not been made available in advance for prospective applicants. It was recommended that a central

Teachability webpage for the school be set up which would detail available supports and other relevant information and make this clearly visible on the web page.

Open days

Open days are another useful form of engaging potential applicants, and are valuable for students with disabilities as they give them a chance to assess the physical environment and perhaps get a sense of the school's overall ethos. The audit led to a suggestion that this approach be made more accessible through the creation of an internet-based 'virtual open day' As with many forms of accessible design, the virtual open day is also of benefit to international students or students who cannot attend.

Selection process

The selection process was also addressed in the audit. For most school programmes this involves attending a 'selection day' which consists of a variety of activities, including group work and interviews. Staff felt this presented some of the most challenging difficulties for students with disabilities. To overcome this, one recommendation was that applicants get clear and detailed information on the selection process before attending the selection day. This was to allow candidates to be aware of potential barriers, , and to make the school aware of difficulties that may arise. However, staff expressed concern about the legislative implications of interviewing and consequently a recommendation was made to request specific input on this from the disability office.

Lectures and seminars

Lecture delivery was deemed one area where improvements had been made, for example by providing notes/presentations in advance and by allowing students to record lectures or by making video materials used in class available online. This applied also to seminars, tutorials or other small-group type activities. The audit confirmed that readings for these were almost always made available in advance. One issue, however, was accessibility of presentations made by the students themselves and this led to the suggestion that when students are provided with guidelines for their presentations, these should include accessibility guidelines.

Assessments

The audit also indicated that assessments had improved with many programmes offering a range of formats including case studies and presentations. Some programmes also include a small assignment early on in the year which allows potential difficulties to be identified in good time. In addition, most staff were found to provide comments on work in typed format. The only recommendation in this area was that assignment questions and details be provided as early as possible.

Placements

Many Moray House programmes include a placement or work experience type component. The audit identified this as the area staff felt was most problematic for accessibility. A provision already in place in some programmes requires students to fill in a 'pre-placement learning needs form' which can potentially identify possible

accommodations which in turn can be communicated to placement agencies. Information on the physical accessibility of placement locations is also sometimes requested by the school. The audit identified a limited number of accessible placements available and a lack of clarity on confidentiality. As a result, staff were uncertain whether or not, or in what circumstances, they could communicate information about disabled students to placement agencies. Two recommendations were made here. First, accessibility information should be provided for each placement. Second, that, with student permission, placement tutors should be informed of student's disabilities, the accommodations they avail of and the supports they received at university.

Progression

On progression from third level education, the audit indicated that students would find information transition to employment useful and the report recommended that the disability office and career services provide such information.

School of Geography and Geosciences, St Andrews University

The school of geography and geosciences at St Andrews exemplifies another successful implementation of Teachability but it also offers an interesting insight into the role it can play around difficult and challenging barriers. This is examined below with reference to the field trip component of programmes the school offers.

Implementing Teachability at St Andrew's began with an introductory day where staff learned key elements of the programme including inclusive practice, alternative adaptations, and the notion of 'core course requirements'. These staff went on to facilitate the school's self-audit.

In line with the Teachability approach and its emphasis on 'core requirements', staff identified that the central aim of most courses centred on the observation and interpretation of geological phenomena. In most instances, the collection of data on such phenomena posed many difficulties for accessibility and challenges for students with disabilities. In particular, field trips were identified as a major issue as they were often inaccessible for those with mobility impairments or sensory impairments, especially visual ones (Simpson, 2002). It is not difficult to imagine how, for example, a trip to observe rock formations in the Scottish highlands would present considerable difficulties from an accessibility point of view. However, field work has become increasingly significant in third level science courses in line with the UK's Quality Assurance Authority Benchmark for Earth Science, Environmental Science and Earth Studies (Simpson, 2002). This growing emphasis on field work is likely to be the case, to a greater or lesser extent, internationally and across disciplines as placements, work experience, field trips become more prevalent and important in third level education in the context of increasing emphasis on 'real world skills' and non-traditional learning environments.

However, by identifying that the observation and interpretation of the data was the core objective, staff could focus on removing barriers to this rather than allowing the inaccessibility of sites where data are collected (the field) to exclude some students. The school established what it called 'equivalent alternatives', activities which provided

the equivalent learning experience but through alternative means. These equivalent alternatives include:

- virtual field excursions
- video records of field excursions
- photographic displays
- use of samples collected in situ.

To facilitate this approach, the school trained a technician in the creation of virtual environments, and purchased the required software and cameras. The technician attends field trips and develops virtual environments based on them. This allows all students to participate in the observation and interpretation of data and therefore to complete core requirements and learning objectives. It is worth noting that this intervention has benefits beyond the issue of accessibility for students with disabilities. For instance, weather conditions often hinder learning on field trips, or even make trips impossible, and virtual field trips thus become an important resource for all students. The creation of virtual field trips provides an insightful example of how barriers to learning which may initially seem to pose extreme accessibility challenges can be removed, and the contribution the Teachability audit, with its emphasis on identifying core requirements, can make. Some staff were initially reluctant to accept that such activities could offer learning opportunities equivalent to field trips. However this has changed during implementation.

The objective of Teachability is that the universal design principles be complemented by measures to meet more specific needs, thus ensuring that no students are excluded. For those with visual impairments, the school has developed a 'buddy' system through which the student 'buddy' can provide information and ensure safety. The school also worked with a student with such a visual impairment and a disability support officer to identify and remove other barriers to participation and learning. As a result, lecture presentations are now provided in advance and in enlarged form and all staff are willing to have their lectures recorded. One difficulty identified is the use of microscopes in laboratory work. This has been addressed by software which transmits microscope images to a computer monitor where they can be enlarged. However, it should be noted, as reported by the head of school cited in Simpson (2002), that the school has not yet identified mechanisms to remove barriers for students with no sight.

Outcomes

To date, no evaluation of the Teachability project has been published. It has been extended to 13 institutions in the UK, however, and over 1,100 staff have been trained in its methodology. It is considered to have established itself as a way to demonstrate compliance with current disability legislation in the UK. Overall, Teachability stands out as a resource efficient and pragmatic approach to accessibility. Its particular benefits have been identified as:

- It provides a systematic, user friendly approach and materials.
- It is a useful mechanism for ensuring compliance with legislation.

- It allows staff to 'design in' accessibility and remove barriers. This reduces the need
 for ad hoc accommodations and, importantly, can benefit students who do not
 disclose a disability as well as students in general.
- Its systematic nature and whole institution approach allow for a 'root and branch' audit of accessibility, ensuring consistency throughout students' learning careers.

Finally, Teachability has been effective in raising staff awareness of accessibility.

Comment

The Teachability approach has many strengths. Some relate to the principle of universal design per se, in so far as it can provide benefits to all students. At the same time, the approach incorporates specific measures for specific disabilities or students. In addition, involving those closest to the delivery of educational programmes in the audit and subsequent modifications, the project helps to ensure that staff awareness and responsiveness is embedded within the design and delivery of the curricula.

More specifically by providing a guided process of self-audit, Teachability harnesses the skills and insights of those involved in the design and delivery of curricula as well as involving students themselves. This department-wide approach implemented by the two examples discussed here also ensures that the process is not confined to individual staff or lecturers but is extended across the entire teaching department and as noted above this can have positive benefits as sceptical staff may over time come to see the benefits of innovation. Overall, the intervention provides an example of a systematic approach to up-skilling staff and ensuring accessibility of the curriculum at the same time.

More information at: www.teachability.strath.ac.uk

6.4 Inclusive Third Level Education for Adults with Intellectual Disabilities in Alberta, Canada

For almost 20 years in Alberta, students with developmental disabilities have been successfully and fully included in university and colleges, attending classes and pursuing programs of study with their non-disabled peers, taking courses from anthropology and archeology to sociology and zoology, choosing career training from early childhood educator to journalist, participating in post-secondary sports, cultural activities, field studies and practicum' (Uditsky & Hughson, 2007: p1)

The above quote gives an indication of what has been achieved through inclusive postsecondary education (IPSE) for students with intellectual disabilities (referred to as developmental disabilities in the Canadian context). As many IPSE advocates point out, the potential of individuals with intellectual disability has been continuously underestimated and the 'norm' of segregation continues. In general, postsecondary options for students with intellectual disabilities are either non-existent or limited to non-inclusive forms of education typically focusing on life skills and often linked to supported employment type models. This case study focuses on an example of inclusive

education in Alberta, Canada which challenges this by facilitating the participation of adults with intellectual disabilities in a variety of postsecondary educational pursuits.

Advocates point to IPSE as a logical extension of the research which suggests the benefits of inclusion of students with intellectual disabilities in primary and secondary level education (Uditsky & Hughson, 2007). In addition to employment outcomes, these benefits include the opportunity for engaging in culturally valued activities. IPSE is also informed by a human rights perspective which stresses access to third level education as a universal right (Uditsky & Hughson, 2007; Mosoff *et al*, 2009; Weinkauf, 2002).

Empirical/policy context

Existing research on postsecondary outcomes for students with intellectual disabilities gives cause for concern. As Uditsky and Hughson (2007), writing in the Canadian context, note, 'follow up studies over the last 15 years indicate that high school graduates with developmental disabilities are socially isolated, unemployed or earn wages well below the poverty line'. They cite a variety of literature in this regard including Haring and Lovett (1990) and Blackorby and Wagner (1996).

The statistics for Alberta in the 1997-98 academic year show that only 3.8 per cent of students graduating from second level special education entered postsecondary education (Weinkauf, 2002). All of those that did progress to postsecondary programmes, took part in one of the eight transitional vocational programmes, which are typically one-year college courses with a focus on academic, life and career skills, and supervised work. These are also segregated environments. Research has indicated that these programmes include insufficient emphasis on education and minimal interaction with non-disabled students (see Gowdy, 1998 cited in Weinkauf, 2002).

It was in this context that the IPSE first emerged in Alberta. IPSE, began with a parent-led group in Edmonton who had experience of campaigning for their intellectually disabled children's inclusion in education at first and second level. The first IPSE programme in Alberta was established in February 1987 and was called the On Campus Programme. Since then, the approach has been replicated in many other institutions throughout the province. By 2009, Alberta had more inclusive postsecondary options for adults with intellectual disabilities than anywhere else in the world. At that time, there were 18 postsecondary education colleges and universities in Alberta offering opportunities for inclusive education. All institutions have developed their own approach and there is no standardised model in place. The one common feature is that they provide individualised service for each person.

Funding model

The funding model is based on utilising the resources of the university complemented by additional supports. These latter are first, the deployment of facilitators sometimes referred to as IPSE staff, who are employed by disability services rather than the university. On average, one facilitator is employed for every three IPSE students and these provide the main implementation supports required. It has been noted that due

to the low level of remuneration they receive, staff turnover is a problem in some IPSE programmes.

The second funding stream is from the Persons with Development Disabilities fund – in most instances only those individuals entitled to support from this fund are eligible to participate in IPSE.

Multi-agency dimension

The first IPSE programme began with collaboration between parents of young people with intellectual disabilities in Edmonton, and two organisations: the Gateway Association for Community Living and the Alberta Association for Community Living. The latter organisation went on to act as an umbrella organisation for all the universities delivering IPSE programmes and in that role provides resources to institutions and students. The involvement of disability services in employing facilitators is another aspect of the multi-agency element of the model.

Objective

The objectives of IPSE is to ensure that adults with intellectual disabilities can have a fully inclusive educational experience which will enable them to form meaningful relationships, participate in meaningful learning and knowledge, enjoy life-enriching experiences and develop personal identities based on positive and culturally valued factors. The inclusion of those with severe or multiple disabilities is a specific goal. The achievement of employment is also a potential outcome but not necessarily the primary objective of this approach.

Approach

The basic principal underlying the IPSE model is that everybody can be included in postsecondary education – regardless of the level of their intellectual disability. Typically the student profile contains a mix of people with varying abilities and the general policy is to include people with more severe/profound intellectual disabilities. Hughson et al (2006) indicate that five of 42 students enrolled in IPSE programmes in Alberta in 2004-05 had limited or no ability to speak, and four of those were also wheelchair users. In general, the approach is to recruit small numbers of students in any one year and build the supports around their specific needs.

Although various models of IPSE exist across Alberta, they share a set of guiding principles based on the provision of:

- culturally normative pathways to adulthood
- individualised supports
- inclusion within valued contexts that have high expectations for learning and participation
- normative and valued identities and roles
- diversity of relationships
- access to relevant and expansive curriculum.

Weinkauf (2002) has identified core elements across three IPSE programmes in Alberta, and these indicate the underlying nature of this form of educational provision. Some of the most important include:

- IPSE is available to any adult with an intellectual disability
- IPSE is totally inclusive across the educational experience
- IPSE programmes encourage self-determination
- education extends beyond the classroom, including recreational and social activities.

Implementation

Implementing an IPSE programme, while varying from institution to institution, involves several common elements. In the first instance, it requires careful planning: in Edmonton, the process from the initial idea to the first student intake took about four years.

An important part of planning for IPSE is to develop a clear understanding and a clear vision of what is meant by mainstreaming and inclusion. The model values quality of life and recognises that while many people with intellectual disabilities in Canada have an individual education plan, few have a good life. Consequently advocates of the programme caution against planning for trivial outcomes and argue that programmes that are not fully inclusive can give a student with an intellectual disability a 'parallel life' rather than embedding them in the 'mess of life' at the university. For IPSE, inclusion in postsecondary education means that adults with intellectual disabilities are not grouped together or provided with other segregated services such as life-skills training. Instead, the model embeds adults with intellectual disabilities into the college curriculum. In line with this, IPSE students, regardless of their level of disability, determine their own course of study and participate in that course for three to five years. They take part in the course as much as possible and are also involved in extra-curricular activities such as sports, social events and so on. An important part of the IPSE model is that all staff of the university involved with IPSE students use the language of the university, rather than the language of services.

Once enrolled, IPSE students are assigned a facilitator and these facilitators are central to provision of support to participants. Facilitators are usually employed by disability services rather than the university and typically have a background in rehabilitation and education. Each facilitator works with up to three IPSE students in any given academic year. Facilitators fulfil a number of functions, which are determined by individual support plans developed with the student.

First, facilitators provide friendship and personal supports to the IPSE student. In this way, they are involved in informal counselling around decision-making and problem solving related to any aspect of the student experience.

Second, they provide direct support to students for course materials and assignments. In this respect, facilitators carry out tasks such as turning text into plain language or graphics, preparing notes, identifying and providing required curriculum and assessment

supports, text revision and modification, peer tutoring, class review and assignment completion with staff support.

Third, they are involved in recruiting and facilitating additional support which may be needed, for example from volunteers and peer-support. Thus, the facilitator seeks to develop the natural supports of the IPSE student, such that their life experiences within the university setting is based on real friendships not paid supports. Finally, IPSE facilitators also support other stakeholders in the educational environment, including in particular teaching staff.

IPSE programmes require a degree of flexibility and a strongly student oriented approach. For instance, many students will not obtain a degree or equivalent qualification but will be granted a certificate of participation or other form of institutional recognition or certification. Students leave the college with a portfolio, including work experience, any assignments completed, references from professors etc. Very importantly, they graduate with the other students in their course.

Outcomes

A principal benefit of IPSE has been identified as the participation per se of up to 50 students with intellectual disabilities in third level education on a yearly basis. These students can pursue their interests in a manner equivalent to their non-disabled peers and in a non-segregated environment. This is an important achievement, particularly when third level education is associated with demanding work and a 'meritocratic' ethos which, while supposedly neutral, has historically excluded a variety of social groups, persons with intellectual disabilities foremost among them. In this regard, IPSE can be considered a very significant, even radical, intervention in ensuring access to third level or adult education.

Research has identified a variety of positive outcomes which arise from participation in IPSE programmes (Weinkauf, 2002). These include:

- academic benefits including the development of key reading, writing, comprehension and language skills
- self-determination including an increase in social skills
- job skills
- social networks including meeting people, creating relationships, opportunities for same-age interaction
- self-esteem including personal growth.

The positive factors which contributed to outcomes in these areas were identified as:

- facilitator support
- learning adaptations
- instructor involvement
- postsecondary context
- other students.

Although it is not a major focus of this approach, research suggests that about 70 to 80 per cent of IPSE students secure employment, compared to about 30 to 40 per cent for people who do not participate in higher education. Uditsky and Hughson (2007)**b found nearly 50 per cent of former students were employed in the retail sector, with 20 per cent in office/administration work and 20 per cent in the hospitality/catering sector. Many students, it is worth noting, were also engaged in employment during their studies (49 per cent) or during summer vacations (74 per cent). However, and returning to the contributing factors, this research also found that employers did not report that former students' participation in IPSE was a factor in recruitment and in some cases were unaware that students had participated in IPSE. Rather, employers tended to stress personal attributes of former students and what these attributes contributed to the work team. This draws attention to the role of IPSE in contributing to confidence and interpersonal skills. As Hughson *et al* (2006 p27) note: 'Arguably... being able to develop personal qualities (confidence, independence, etc.) through the experience of attending postsecondary contributes to prospects for long-term employment in an indirect way.'

Research also highlighted that the most common route to employment for IPSE graduates was through some form of personal contact of students, families of facilitators. It was rare for a former student to apply for a job, undergo an interview process and be selected. Hughson *et al* (2006, p45) note that research participants emphasise 'the importance of networking and personal connections for finding employment'.

Comment

The central objective of IPSE programmes is access to third level education for individuals with intellectual disability and in this regard it has been successful. Additional benefits have been identified, however, in terms of positive post-participation employment outcomes as well as learning of an academic, self-development and interpersonal nature. At the heart of IPSE programmes is an individualised support structure which is ambitious in removing barriers and establishing accommodations on a student-by-student basis.

The IPSE model also demonstrates how natural supports can be used to enable people with intellectual disabilities to participate in education. These natural supports include family members, friends, fellow students and volunteers.

The findings of this research challenge the dominant perception of the university to employment transition. A narrow view may suggest that the educational institution transmits skills to the student which are required in the labour market and hence are a vehicle for the students' later employment. In the case of IPSE, the factors at play seem to be somewhat different. First, the engendering of confidence, self-esteem and, importantly, self-determination skills seem to play an important role, and these are all outcomes which have been identified in the existing research (Mosoff, 2009; Weinkauf, 2002). Second, IPSE enables participation in an educational environment were future paid employment is a norm which students are encouraged to pursue. Third, and finally, IPSE participation leads to the development of 'natural supports' in the form of contacts

and student social networks and these have been identified as the most frequent route to employment.

One limitation of existing research on IPSE, which forms the basis for the above, is that the literature is overwhelmingly written by its advocates. Moreover, the studies cited here for IPSE initiatives in Alberta, Canada, often involved data collection with project staff, thus creating a context in which respondents were unlikely to criticise the programme. Nevertheless, it is also the case that the establishment of IPSE has been an advocate- and activist-led process and the research reflects this. Some research, for example, has been specifically conducted as 'action research' (Hughson *et al*, 2006). In this sense, this case study is an indication of the contribution made by disability advocacy both in establishing educational interventions and in researching their effectiveness.

More information available at: www.cci-cca.ca

6.5 Inclusive Vocational Training in Australia

This case study describes approaches to vocational training for people with disabilities implemented in Perth, Western Australia. The implementing body is EDGE Employment Solutions, one of the largest disability employment services in Australia. EDGE works exclusively with people with disabilities and most of its work is directed at placing them directly into employment. It achieves this in part by approaching employers to identify jobs in their businesses which a person with disabilities could fill. It offers ongoing support to recruited employees and their employers.

This case study describes an innovative approach to vocational training based on the place-then-train model widely used in Australia. By developing a partnership with relevant organisations, EDGE enabled a number of people with disabilities to access traineeships or apprenticeships. These are both collectively referred to as Australian apprenticeships and are specific training courses reflecting 'workplace performance' and 'nationally endorsed' industry and business standards. A typical apprenticeship or traineeship will comprise 80 per cent paid work and 20 per cent unpaid study. Most traineeships are based on one- or two-year courses and lead to a certificate at level I or II, considered entry level. Most apprenticeships last three to four years and lead to a certificate at level III or IV. Both are offered in traditional trades but have also been developed in business, retail, hospital, community services and industry. In 2011, more than 600 distinct apprenticeships and traineeships were provided across 17 industries in Western Australia.

Empirical and policy context

As elsewhere, unemployment levels among people with disabilities in Australia are higher than those without. Whereas 80.6 per cent of the non-disabled population is in the workforce, only 53.2 per cent of those with disabilities are. In addition, only 15.2 per cent of people with profound or severe disability are in the workforce. Profound or severe disability is defined as sometimes or always requiring assistance with at least one of the core activities of communication, mobility or self-care. It is this category that comprises the target group for EDGE (and other disability employment services in Australia).

More broadly within the Australian context vocational training for people with disabilities is considered an appropriate policy option given the many jobs requiring specific training and the fact that without formal qualifications, employment opportunities are increasingly limited to menial, casualised low paid positions with poor job and income security and few professional development opportunities. Moreover, Australia has experienced periods of high growth in certain sectors of the economy and particularly in those sectors (for example construction) where vocational training including apprenticeships are most pertinent. In this context, the broad objective of social inclusion is seen as being served by ensuring that people with disabilities can avail of such training at the same rate as the rest of the population.

Both rates of participation and completion in vocational training by people with disabilities were lower than for the non-disabled population. The Australian government introduced the Bridging Pathways strategy in 2000 to address this, with the overall objective of balancing participation rates of both populations.

The first of the EDGE models examined was established immediately before the introduction of Bridging Pathways. The second two were implemented within the timeframe of the strategy and can be seen as an example of good practice for inclusive and meaningful vocational training.

Funding model

Throughout Australia, organisations designated disability employment services get funding from the government. It is targeted at job seekers classified with profound or severe disabilities. Like other disability employment service providers, EDGE caters for job seekers with intellectual, sensory, physical neurological and psychiatric disability. The contract between these services and the government carries significant milestone payments, triggered when specific outcomes, such as placement in employment, are reached. EDGE can secure funding through disability apprenticeship subsidy programmes that offer generous wage subsidies for employers and funding for workplace modifications, aids and equipment, extra tutoring, interpreter or note-taker support, and mentor support.

In July 1999, to stimulate vocational education and training outcomes, the Western Australian Department of Training called for submissions from suitably qualified organisations to undertake a two-year pilot project to stimulate participation of people with disabilities in apprenticeships and traineeships. EDGE was successful and had proposed the Western Australian Apprenticeship Project. Total funding for the pilot was \$75,000 in the first year and \$125,000 in the second. Additional funding was also available from the colleges' disability support services where apprentices and trainees studied and which facilitated additional classroom supports. The target was 25 to 30 new apprenticeship placements over the two years.

Interagency involvement

The place-then-train model of vocational training is widely used for people with disabilities in Australia. It shares the approach embedded in apprenticeship and

traineeship training whereby participant spends most of their time working with an employer and one fifth in a classroom setting. The employer does not actually employ the trainee. Instead, they are 'employed' by group training organisations (GTOs) and are then placed with various host employers for the duration of their training on a labour hire basis. These trainers are widespread throughout Australia and collectively are the largest employer of Australian apprentices. In 2011 they employed about 42,000 apprentices and trainees. The benefits of this system include the fact that the host business does not bear training administration and payroll costs nor do they have to commit to the trainee for the full duration of the training: they can ask the trainer who employs the trainee/apprentice to take them back or replace them at any time.

The interagency model developed by EDGE involved an evolving relationship with local group training organisations over several years in three phases.

The first phase of the interagency approach began in 1999 when the Western Australian Apprenticeship project was launched. To deliver this project, an alliance was formed between EDGE and two local trainer organisations. This relationship provided EDGE with access to a network of employers who typically hired apprentices and trainees, while those who had no expertise in recruiting, marketing or supporting apprentices and trainees with disability could improve their recruitment levels of such candidates.

The success of the Western Australian Apprenticeship Project resulted in a follow-up initiative in 2002. The National GTO Disability Best Practice Project, sought to explore and reinforce best practice among group trainers across Australia in placing and supporting apprentices and trainees with disabilities. An initial survey of all 180 group training organisations in Australia identified those which provided services to large numbers of clients with disabilities. Further investigation identified a purposive sample of six which were selected because they dealt with larger numbers of clients with disabilities; had achieved successful outcomes; and had identified innovative approaches to supporting these clients. Based on a study of these six, a best practice guide was developed to inform on interagency practice across the GTOs and their local disability employment service.

Finally, based on the above, a third project sought to expand the interagency model throughout Australia. Every disability employment service and group trainer in Australia was invited to join the initiative which established working relationships using the model developed in Perth. Memoranda of understanding, considered central to the Perth success, had to be developed between partnering agencies. Ultimately 20 partnerships were formed.

Approach

EDGE operates under what is called the place-then-train model in Australia. Elsewhere, this approach can be referred to as on-the-job training. It involves careful job matching (finding jobs well matched to the job seeker's abilities and interest); individualised marketing (finding the right job with the right employer in the right location for that job seeker); intensive on-the-job support (implementing what are referred to as powerful

training technologies); utilising natural supports inside and outside the workplace, and long-term follow-up with the worker.

The Western Australian Apprenticeship Project was a departure for EDGE as it had not previously supported people with disabilities through long-term formalised training within the Australian apprenticeship framework. The initiative specifically sought to increase apprenticeship placements among job seekers with disabilities supported by EDGE.

The approach to implementing and succeeding with this project was based on careful assessment of existing challenges to participating in apprenticeships and traineeships and to systematically address these barriers. The barriers were identified as:

- First, finding a suitable placement agency willing and able to provide the necessary placement and post-placement assistance. People with more significant disabilities are typically referred by agencies which have little involvement in vocational training, are not required or funded to place a proportion of people on their register in apprenticeships and are generally not skilled or inclined to actively seek such placements. EDGE assumed this role for itself.
- Second, whereas group trainers operate extensively and effectively within the
 vocational training sector most lack the expertise or resources to recruit, indenture,
 place and support apprentices and trainees with disabilities. This was addressed
 through the interagency approach previously noted.
- Third, convincing prospective employers that people with disabilities can complete
 a new apprenticeship and become competent trades people presents difficulties
 which had to be overcome.
- Finally, if a placement was secured the next obstacle was often dealing with
 co-worker misconceptions and disability stereotyping. This could occur in the
 workplace, where the relative youth and inexperience of other apprentices
 meant they were not always the most accepting and accommodating co-workers
 for a person with a disability. It could also occur within the colleges where most
 apprentices fulfil their study requirements.

Other barriers identified included transport difficulties, and inflexible hours and times of work which could cause difficulties for apprentices and trainees with disabilities.

Implementation

The following key actions were undertaken in implementing the Australian Apprenticeship Project:

Staffing

A project co-ordinator was appointed to oversee implementation of the initiative and specifically to recruit candidates with disability and secure suitable apprenticeship and trainee positions for these. In the second year, a second full-time staff member was appointed to concentrate solely on supporting apprentices and trainees though their studies.

Partnerships

EDGE developed alliances with two local group trainers to provide access to a network of employers who regularly took on apprentices and trainees and to enable the vocational training element to be delivered.

Recruitment

The project target was to place 25 to 30 apprentices/trainees with disability over a twoyear period. In the first year, suitable candidates were recruited through:

- reviewing the register of 150 job seekers for potential candidates
- placing newspaper advertisements seeking new candidates.

In the second year, referrals from other teaching institutions and service providers were sufficient to fill all available places.

Participants

Twenty-eight candidates were placed in apprenticeships and five were placed in traineeships. The disabilities most commonly represented among those placed were intellectual disability (10), attention deficit hyperactivity disorder (10), cerebral palsy (4), neurological disability (3), acquired brain injury (2) and spina bifida (2). More than 60 per cent of those were aged 20 years or more at the time of placement.

Placement

Placement strategies were similar to those used generally by EDGE to secure award paying jobs (jobs paying the going rate) in open employment for people with disability. Considerable effort was expended on ensuring a good job match before placement.

- 11 placements were secured by responding to advertised vacancies for apprentices and trainees
- six came through canvassing new employers
- six came via contact with employers already engaged with EDGE
- five through the contacts of the group trainer partners
- three through other vocational training providers
- two through the information networks of the registrants.

Pre- and post-placement workplace supports

Once placement was secured, a series of actions was undertaken to ensure the trainee could participate in the workplace and training environment. Workplace supports included the following:

- Measures to prepare supervisors and co-workers for the arrival of the new apprentice or trainee. Within this context, any concerns the employer or supervisor raised on accommodating the trainee or apprentice were addressed.
- Co-operation of employers was sought in providing the necessary instruction and guidance for the apprentice or trainee during the apprenticeship.

- EDGE personnel familiarised themselves with the tasks the apprentice/trainee was expected to perform.
- EDGE personnel also arranged for any needed workplace modifications or equipment aid to be provided.
- Personnel also assisted with the apprentices' and trainees' skill acquisition and general performance when required.

Training supports

Supports provided to participants during the training component were also crucial. These included arranging for interpreters, note-takers, tutors, mentors and equipment modifications if required. College disability services officers also played an important role in arranging necessary on-campus supports. College funding was used for homeand college-based tutors, online equipment at home, scribes (note-takers) in class, modifications to equipment, mentors and alternative assessments. In addition, training provider objections to teaching apprentices with disabilities had to be overcome.

The most common training issues that arose for apprentices placed through the project were: adjusting to the adult learning environment of the college (self-advocacy and taking responsibility for own learning); academic difficulties, requiring additional tutorial support; difficulties with practical components of the course, requiring a mentor with practical skills in that trade area; and difficulty in applying theory to practical work. The average monthly support provided to a trainee was eight hours and to apprentices, 16.

Outcomes

In this first initiative, 11 apprentices and all five trainees completed their courses and received certificates. Thus, the combined completion rate of apprentices and trainees was 48.5 per cent. This was 6 percentage points better than national data for apprentices and trainees with disabilities and 2 percentage points better than those without. This success was seen as legitimising the candidacy of people with disability as apprentices and showed that disability was not a hindrance to completing an apprenticeship or traineeship. Key contributing factors were seen as a combination of good job match, accommodating workplace and intensive post-placement supports.

A second direct outcome was the introduction of a follow-up project, which as previously noted, sought to build on the good experience of the Western Australia Apprenticeship Project. It was called the National GTO Disability Best Practice Project and aimed to identify the factors that contributed to best practice in partnership approaches to the placement and training of people with disabilities. The project found formal relationships cemented through memoranda of understanding which clarified the roles of the group trainers and disability employment services nurtured trust and confidence. Other key success factors included:

- cross-organisation training and knowledge sharing
- involving local schools
- utilising existing partners and professional networks

- creating and disseminating joint disability appropriate information for prospective apprentices and trainees with a disability
- creating and disseminating joint marketing information and strategies employers
- capitalising on supplementary expertise.

The third initiative was based on the combined learning of the previous two. It was called the national GTO/DES Partnership Project and sought to develop formal partnerships on nationwide which would increase the number of people with disabilities to be recruited, placed and supported in apprenticeships and traineeships across Australia. Every group trainer in Australia was invited to participate. During 2003-04, 20 partnerships involving group trainers and disability employment services were funded.

The partnerships were resourced through training from EDGE as well as by resources developed during the earlier pilot project. A total of 282 group trainers and disability employment service staff participated in a one-day workshop. Each partnership had to place eight apprentices and trainees with disability over a two-year recruitment and placement period. EDGE provided a telephone and e-mail help-desk service for all 40 partnership members and distributed quarterly e-newsletters that reported on the progress of each partnership, profiled individual partnerships and apprentices, provided general advice on common hurdles and summarised help-desk enquiries it had received along with the advice provided.

Over the two-year period 38 apprentices and 84 trainees were placed by the 20 partnerships. The model of support provided was similar to that described above and represented a new departure for the partners. Most group trainers visit the worksite of an apprentice or trainee every six to eight weeks during which the focus is on general apprentice/trainee performance, progress with work-related studies and general administration. However, most apprentices and trainees with disability required significantly more support, both on and off the job. Staff from the relevant disability employment service provided intensive support to ensure that the apprentice or trainee was learning the required skills in a timely and competent manner. They also worked closely with the training provider to support the theoretical aspects of the course and to transfer that knowledge to the worksite.

The completion rates for the two groups were 44 per cent for apprentices and 62 per cent for trainees. This was a combined completion rate of 56.8 per cent which was 14.7 percentage points higher than apprentices and trainees with disability generally and 10.7 percentage points higher than those without. A more extensive analysis of outcomes for apprentices and trainees with disabilities in 2010 indicated that those who completed apprenticeships and traineeships had higher earnings and greater job durability than other disabled workers and in some instances non-disabled workers. That study concluded that undertaking apprenticeships and traineeships appears to be a powerful equalising factor by significantly reducing pay inequity between disabled and non-disabled workers (Lewis *et al*, 2011b)***.

It was also noted that the attractiveness of work-based apprenticeships and traineeships relates to in-training benefits as well as post-training outcomes. While in training, apprentices and trainees learn a vocation, are exposed to workplace expectations,

fulfil a valued social role as a worker, establish social relationships with co-workers, and obtain a nationally recognised qualification when successfully completing their course (Lewis *et al*, 2011b)***.

The three projects were considered by those involved to have successfully demonstrated that apprentices and trainees with disability can, with appropriate support, complete their courses at a rate comparable or superior to those of their non-disabled peers. The increase in the completion rate from the first to the third project suggested improvement and refinement in the recruitment, placement and support technologies applied. It is also seen to suggest the benefits that can accrue to this population when the skill and resource capabilities of generic apprenticeship/traineeship providers and specialist disability employment services, that traditionally have little to do with each other, are brought together to support this group.

Three discrete processes involved in successfully placing and supporting apprentices and trainees with disabilities were identified. They are:

- recruiting candidates and matching them to suitable apprenticeships and traineeships
- placing apprentices and trainees in the right apprenticeship or traineeship with the right employer and or host employer
- supporting apprentices and trainees on site and off site for the duration of their course.

The partnership between the two types of organisations was considered essential to the projects' success. These organisations had complementary expertise and resources. Whereas the group trainers had no capacity to attract or locate candidates with disabilities, the disability employment service could fulfil this role and job-match candidates before their referral to the employer. The DES was also seen to have a unique contribution to make in promoting disabled candidates to prospective employers who may otherwise overlook them in favour of non-disabled candidates.

The elements of successful partnerships and interagency working were identified as:

- A clear and shared understanding of the expectations and responsibilities among
 partners is important. This can be achieved through a well-crafted memorandum of
 understanding that describes mutual responsibilities of the signatories.
- Staff across the partner organisations must have a shared commitment to the partnerships and the candidate it seeks to support.
- A clear understanding and appreciation of the expertise of their partners.
- A commitment to work collaboratively.
- A willingness to resolve issues that may arise.

The more successful partnerships in the project also developed joint information brochures, cross-linked their websites and held joint meetings with prospective employers, describing the merits and suitability of their candidate and outlining the roles of each organisation in supporting candidate and employer. This cemented the

partnership and convinced the employer they were not only getting a carefully matched and motivated apprentice or trainee but also that the support of two closely allied and complementary services was available.

Comment

In the context of international policy commitments to inclusive vocational training for people with disabilities, the Australian Apprentice Project and its follow-up initiatives are interesting examples of what can be achieved. The model is interesting for a number of reasons.

- It involves provision of appropriate and adequate supports to participants at all stages in their 'student journey'. Thus measures are there to ensure that participants can access the apprenticeships and associated employment, that they can participate in these and progress to open employment.
- It embodies a carefully planned and implemented interagency model capable of supporting effective co-ordinated service delivery.
- It incorporates the expertise of disability specific organisations and can thus reach and support people with disabilities who may otherwise have been excluded.
- It achieves good outcomes by enabling participants to progress to employment and raising the visibility of people with disabilities as skilled trades people.

Lewis et al (2011a***, 2011b)*** note that their studies cover placement and support over a ten-year period, 40 different service providers across every state of Australia, and have included every major disability group, a wide range of ages and more than 50 different apprenticeships and traineeships. They argue that these projects have demonstrated that apprentices and trainees with disability can with appropriate support complete their course at comparable or superior rates to their non-disabled peers. 'The outcomes demonstrate the benefits that can accrue to apprentices and trainees with disabilities when the skill and resource capabilities of generic apprenticeship/traineeship providers and specialist disability employment services, that traditionally have little to do with each other, are brought together to support this group' (Lewis 20011b: p187).

More information available at: www.edge.org.au

6.6 Federal-Sponsored Vocational Rehabilitation Programme in US

This case study examines the vocational rehabilitation programme implemented throughout the US which is funded by federal government and delivered at state level by state rehabilitation agencies. It may also be delivered by other bodies with funding provided by the state agency.

The objective of the Federal Vocational Rehabilitation Programme is to co-ordinate service provision as needed from different professions (including education, medicine and psychology) on an individual basis to prepare a client for work. Clients are those who have physical disabilities, chronic disease, congenital problems and psychiatric conditions. The vocational rehabilitation is targeted specifically at those with the most

severe disabilities who need the most intensive services provided through rehabilitation programmes. Many who avail of this are those who have acquired disabilities and whose working lives have been disrupted as a result.

Given the many participants involved in vocational rehabilitation, the body of literature on specific programmes and on their impact is vast. Much of it relates to the outcomes of vocational rehabilitation for those with specific disabilities and is funded by the federal government as it seeks to identify and promote best practice. This case study examines the overall model as delivered across the US and highlights, as appropriate, specific innovations or modifications in some states.

Empirical and policy context

Vocational rehabilitation has been identified as a 'dynamic enterprise constantly evolving in response to contemporary issues, the changing demographics of the workforce and to alterations in health and public policy' (Elliott & Leung, 2004). Thus, while vocational rehabilitation has been implemented in the US since the early 20th century, the current model gained impetus during the 1980s. That decade witnessed a steady rise in the incidence of disability, work-related injury and chronic disease in the US. This reflected in part the ageing of the American population as well as improvements in medicine which meant that more individuals survived trauma such as spinal cord injury or traumatic brain injury. These developments posed the single greatest challenge to health care service delivery systems.

An early legislative instrument on this is the US Vocational Rehabilitation Act of 1954 which funded an expansion of services and facilities to people with mental retardation. Later, in 1967 further legislation extended its provisions to those who were deaf-blind. Amendments in 1973 under the Rehabilitation Act (1973) established a priority of services to eligible people and allowed greater consumer input into the rehabilitation process. Over the last two decades, the federal government has implemented legislative measures to provide a policy framework and funding for promoting integrated employment for people with disabilities. This includes the Developmental Disabilities Assistance and Bill of Rights Act (1986) and the Vocational Rehabilitation Act amendments (1986). More recent legislation and initiatives include the Workforce Investment Act (1998), the American with Disabilities Act (1990) the Ticket to Work and Work Incentives Improvement Act (1999) and the Workforce Investment Act (1998). The latter is seen as placing the provisions of the Rehabilitation Act into a more mainstream labour-oriented legislation.

Funding model

The vocational rehabilitation programme is jointly funded by the federal and state governments. The contribution of the former is determined by the state's per capita income, so those states with the lowest per capita income receive greater federal funding. Both funds cover the costs of providing vocational rehabilitation services to individuals. Services to families of disabled individuals can also be funded when such services will contribute substantially to rehabilitation. Funds can also be used to provide the service for the benefit of groups of individuals with disabilities, for example through

the establishment of community rehabilitation programmes. Only the designated state rehabilitation agency can draw down federal funds, but it may then reallocate these to other state organisations to deliver these programmes.

All agencies involved delivery may seek funding from other sources to develop innovation and pilot new approaches. In addition, as the model involves referring their vocational rehabilitation clients to other agencies for specific training or other supports, they benefit from the budgets of these organisations. Most services delivered under the framework of the vocational rehabilitation programme are free to the client, but some must be paid for.

Interagency approaches

By design, the rehabilitation programme is multi-agency in approach given that the services for any client will typically be provided by more than one agency. Indeed the vocational rehabilitation system is a term used to refer to the state agencies that implement the public vocational rehabilitation programme at state level and also to any agency (in mental health, for intellectual and developmental disability, workforce development, community rehabilitation providers) that supports them in this effort. Each agency will draw up a contract of co-operation outlining the understanding, commitments and responsibilities underpinning the co-operation.

Common examples of collaboration include:

- cross agency planning
- cross agency co-ordination of integrated employment services
- sharing of intake and eligibility information for individuals
- sharing data on outcomes.

Other interagency practices, less frequently engaged in, include blending funds to support individual employment outcomes, combining funds to support shared activities and shared monitoring of employer provider services.

The model of vocational rehabilitation delivered is essentially a multi-professional or multi-disciplinary approach which brings together a range of expertise from different disciplines and, frequently, from different agencies. The precise combination of expertise is determined by individual needs, thus this is a fluid model which can be adapted and modified as required.

In addition, providers of the services generally work in partnership with local businesses and communities to develop and identify employment opportunities for people with disabilities.

Approach

Rehabilitation is generally overseen by a specialised co-ordinator usually referred to as the rehabilitation counsellor. The counsellor oversees the process for each individual client as well as being integral to the process themselves. In general, rehabilitation involves a sequential and interrelated set of activities. These begin with referral to the

vocational rehabilitation agency after which the applicant is assessed for eligibility. Once eligibility has been established, and depending on funds available, a counsellor is assigned to the client who will work with them and on behalf of their client to initiate, arrange and co-ordinate the required services.

Certain elements are determined at federal level and are consistent across all states. Some latitude is available at state level and individual state rehabilitation agencies or other providers of this programme are free to seek funds to allow innovation to occur. Services are time limited and require recipients either to obtain jobs where they do not require paid supports or transition to another state agency to receive long-term employment supports.

Eligibility for services

In most vocational rehabilitation agencies, a client can be referred to a rehabilitation counsellor by a number of sources. Upon referral a prospective client is screened and evaluated for eligibility and appropriateness. Eligibility is determined when an individual has a disability, can benefit from rehabilitation services in achieving employment and requires vocational rehabilitation services to prepare for, engage in or retain gainful employment. Each applicant must be assessed to determine that their level of disability is a substantial impediment to employment and their entitlements to state support may also be assessed. These assessments consist of medical and psychological evaluations as well as a wide-range of vocational assessments designed to help the counsellor determine eligibility for the services. Diagnostic services may also be needed to gain an understanding of the nature and implications of the disability and to help determine the services needed to attain employment.

Under federal law, if a state does not have enough money to provide such services to all those eligible, the vocational rehabilitation agency must set priorities to serve those with the most significant disabilities. If an applicant is eligible based on the above criteria, the counsellor assigns them a priority category based on the severity of their disability.

- Priority 1: Those with the most significant disabilities which seriously limit them in two or more functional capacities.
- Priority 2: Those with significant disabilities that seriously limit them in one functional capacity.
- Priority 3: Individuals with disabilities.

Under the order of selection guidelines, each state agency must establish a waiting list that pertains to the state as whole, not to the individual agency. Each eligible individual will be placed on this waiting list and provided with services as soon as resources allow. The vocational rehabilitation agency will contact the applicant at least once every 90 days. As soon as a priority category opens, the agency will notify the relevant individuals who may avail of the slot if they wish.

The assigned counsellor then works with and on the behalf of the client to initiate, arrange and co-ordinate services. Their nature and extent will be influenced by the severity of the disability, the applicant's prior psychosocial and legal history and

availability of funds remaining in the state vocational rehabilitation budget for the fiscal year.

Implementation

Delivery of vocational rehabilitation is essentially a multi-disciplinary approach involving case management. The latter is undertaken by a vocational rehabilitation specialist, usually referred to as a counsellor, who works with the client to determine the type of job they want, the barriers their disability causes, resources available to remove those barriers and steps needed to get or return to work. A key element of the model is developing an integrated plan of employment (IPE). This details the rehabilitation programme required to achieve work. It will also include a vocational goal and the services to be provided towards achieving that goal.

The most significant elements in the IPE are:

- listing all options and steps for the individual to complete the plan
- determining client strengths, priorities, concerns, abilities, capabilities, career interests
- determining current client skills, knowledge, attributes and abilities
- facilitating client informed choice of services, service providers and vocational goal
- determining all physical and mental restorative measures
- approving the plan.

The IPE takes account of a wide range of factors relating to the individual, their personal/household circumstances and the wider economic environment. Thus a client's medical records, work and educational history will be noted. Their economic situation and information on their family circumstances will also be noted. In identifying the type of employment desired, the client gets information on jobs available in each industry in their local region and the rates of pay on offer.

Depending on the individual plan, the following services are offered:

- Vocational rehabilitation counselling Generally considered one of the most important services for the client, this is provided by the rehabilitation counsellor. Its objective is to help the client better understand and adjust to their disability; help them choose their employment goal; enable to develop a plan to attain their employment goal and adjust to the changing circumstances caused by their disability. If needed, the counsellor can counsel their family members to help them to better understand their disability and to help them learn how to be supportive of the client during the vocational rehabilitation process.
- Physical and mental restoration This aims to enhance employability by removing or reducing the effects of the disability. It may include limited medical or psychological treatment or therapy, orthotic and prosthetic devices, and other services and devices likely to remove or reduce the limitations caused by the disability.

- Vocational/other training services These services may help a client gain the specific knowledge and skills required to perform the job indicated on their IPE.
 Training for employment can be obtained at a public or private vocational school, college, or rehabilitation facility. Other options include on-the-job training and job coaching.
- Maintenance This refers to financial support for food, shelter and clothing costs
 that occur due to participation in a programme of vocational rehabilitation services.
 They must be a direct result of participation and cannot be normal living expenses.
- Interpreter services This service can be provided for those who are deaf, hard of hearing, or individuals who are deaf-blind and require tactile interpreting services.
 Other types of language interpreting can be provided while receiving other vocational rehabilitation services.
- Job related services These include assistance with job search and placement, and other services to help the client to keep the job. Some vocational rehabilitation agencies can provide some of these services directly while in other situations they may buy them from providers specialising in this area.
- Personal assistance services This consists of services to assist an individual to
 perform daily living activities on or off the job. They are intended to help individuals
 gain greater control of their lives by aiding their ability to perform everyday activities
 as independently as possible. They must be necessary for achieving an employment
 outcome and are provided only while the individual is receiving other vocational
 rehabilitation services.
- Rehabilitation technology These consist of rehabilitation engineering, assistive
 technology devices and assistive technology services. Services may initially consist of
 an evaluation by an assistive technology specialist to help identify accommodations,
 assistive devices and services that can help overcome barriers to independence
 in a training situation, at a job site, or in the home (if needed to obtain and
 retain employment). Assistive technology specialists sometimes recommend
 modifications to vehicles to make them usable for people to have independent
 access to employment.
- Supported Employment Services These specialised services for individuals with the
 most significant disabilities help them obtain and maintain employment. They most
 often consist of job placement and coaching and assisting the individual on the job
 site to assure successful employment. These services are time limited with long-term
 support services provided by another agency or funding source.

Supports to secure and retain employment

The primary objective of the vocational rehabilitation programme is to assist individuals with disabilities to find employment that is consistent with their strengths, resources, priorities, concerns, abilities, capabilities, interests and informed choice. The plan for employment can include services to help the client obtain and keep the job. After they obtain employment, the rehabilitation counsellor will follow up to make sure all is well and that client and employer are satisfied. When the job has been maintained for at

least 90 days, the case can be closed as successfully rehabilitated. The client and their counsellor must agree that the employment outcome is satisfactory and that the client is performing well on the job.

At state level, there is some flexibility in how employment services are delivered. In Oregon for example, placement services are delivered by external agencies which provide a function called job developer. Within the state vocational rehabilitation agency, a specific role called the job developer co-ordinator is in place and this person trains the external job developers on client preparation and employer-focused job development techniques. They also act as a resource through connecting counsellors and job-developers across the state and assist with what are referred to as 'challenging customer circumstances'.

Training is provided to the externally-contracted job developers through a threeday workshop based programme entitled the employment outcomes professional curriculum. The model for this training includes the following four main steps for job development:

- Prospecting: Identifying potential employers, making contacts, and scheduling appointments with employers.
- Needs analysis: Discussing business needs with potential employers, forestalling potential objections about the ability of vocational rehabilitation clients to meet requirements.
- Selling: Presenting potential employees (vocational rehabilitation clients) based on identified business needs and customer match, resolving employer concerns about ability of clients to meet requirements, and confirming agreements about next steps in the working relationship.
- Follow-up: Meeting employers to evaluate placement success, identifying ways to improve effectiveness of placement, and identifying additional opportunities from that employer or referrals to other employers.

If a vocational rehabilitation case has been closed successfully, the client can receive post-employment services. These supports are goal specific and short-term. In many vocational rehabilitation agencies, if a client is approved for post- employment services, they and their rehabilitation counsellor will jointly develop an amendment to the IPE.

Some agencies will also assist individuals to become self-employed. These individuals must complete an assessment of their business potential and complete a small business plan. Some agencies can provide additional assistance to those becoming self-employed via funding for tools, equipment, initial stocks and supplies.

Outcomes

A vast body of literature exists on vocational rehabilitation programme outcomes. Some examines a specific programme delivered by one agency; other studies examine the effectiveness of a range of programmes in supporting specific types of disability (usually acquired disabilities, such as spinal injuries,). Still others look at the overall outcomes at national level. The findings do not always correspond, but they do all suggest that

positive outcomes can be achieved, particularly given that vocational rehabilitation programmes target the most severely disabled.

According to Walls et al (2002; cited in Elliott & Leung, 2004) the number of referrals to vocational rehabilitation agencies remained constant during 1978-1998 and during this time competitive employment outcomes increased from 71 to 88 per cent. There is, however, some debate within the literature on differential outcomes depending on demographic features. Thus some studies have suggested that the outcomes of vocational rehabilitation may be related to disability type. One large scale research project in Florida, for example, found outcomes for those with severe visual impairments were below the national average. Other studies have indicated that ethnicity is also related to outcomes such that those of Hispanic or African-American ethnicity enjoy less favourable outcomes than white Americans. Still other research has found that it is prior educational status and age, rather than ethnicity, that are key determinants of outcomes. There is also some debate on what aspects of vocational rehabilitation are most effective. However, the consensus appears to be that regardless of client characteristics, the most favourable outcomes are achieved by clients who receive job placement supports and by those on whom larger amounts of vocational rehabilitation funding is spent.

Comment

Vocational rehabilitation is commonplace across many jurisdictions. It is a model of intervention that is frequently, but not exclusively, targeted at those with acquired injuries. As such, it is linked to social protection and labour market policies rather than to education and training policies.

It often includes substantial elements of education and training, specific to the needs of the individual. The case management approach allows these, and other, services to be delivered as and when needed by the individual. In this way, the multiple barriers which a disabled person may experience are addressed simultaneously: barriers ranging from a lack of relevant skills, through those related to the impairment and including barriers on employer reluctance to recruit or retain an employee with a disability.

Although the research findings vary somewhat in relation to outcomes, it is consistent in pointing to high levels of progression to employment. These are all the more impressive given that the beneficiaries of vocational rehabilitation must be those with the most severe disabilities.

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7 Main Findings and Implications for Irish Policy Development

7.1 Introduction

In this chapter, we examine the implications of the findings of this review for Irish policy development. The literature reported on in previous chapters was categorised according to definitions of the key terms discussed in Chapter One. These mutually exclusive categories enabled us to examine the full spectrum of education and training, to eliminate ambiguity of definition and to identify gaps in policy and provision. Divergence exists between these definitions and those commonly used in the Irish context. This is particularly the case for further and continuing education, as Irish definitions frequently combine these two sectors, either implicitly or explicitly. Consequently, in this chapter, we use terminology specifically relevant to the Irish context. This is to ensure the implications of effective practice identified in the literature review can be clearly linked to the reality of practice and policy in Ireland. There is just one exception here and that concerns vocational rehabilitation. This term is sometimes used in Ireland to describe day centre provision involving social skills and occupational therapy for adults with disabilities, a form of provision explicitly excluded from this literature review as it incorporates little or no elements of education or training. In this chapter, therefore, the term vocational rehabilitation is used exclusively to refer to multi-disciplinary, multiprofessional, case managed, approaches to helping people with disabilities enter, retain or regain employment. While this specific model is not in use in Ireland, we note that elements of it are provided by the National Learning Network as part of their overall training and support services to people with disabilities.

The literature review shows that across most jurisdictions, there is a policy-rich environment in place for disability. Policies include broad legislative measures in human rights, equality and anti-discrimination, as well as more disability-specific enabling policies which underpin the provision of education and training programmes or supports related to these. These are two very different forms of policy and both play a vital and complementary role in ensuring that adults with disabilities can avail of education and training. The former is necessary to outlaw any form of discrimination that would impede access and participation by people with disabilities on the basis of their disability alone; the latter to ensure that sufficient and adequate provision and ancillary supports are in place so that adults with disabilities can participate in education and training.

In the past 15 years or so, equality policy has proliferated outlawing discrimination on grounds of disability, in line with international policy frameworks established by the US and EU. In Ireland too, disability is one of nine grounds on which discrimination is prohibited. Ireland also shares many of the strengths and weaknesses of the policy domains of other jurisdictions. For example, in most jurisdictions, including Ireland, broad equality legislation is not always accompanied by comprehensive enabling policies. While such policies exist, it is clear they are not evenly distributed across all educational and training sectors. In particular, the higher education sector (in Ireland, that sector which comprises universities, institutes of technology etc) is a major focus of policy and particularly of prescriptive policy, for example in relation to reasonable

accommodations and so on. In contrast, enabling policy in further education and vocational training is less prevalent, although in Ireland as elsewhere both sectors are incorporated into broader legislative instruments, such as those that prohibit discrimination or mandate equal treatment per se. While the further education sector does not have the benefits of measures such as the HEA disability access programme and does not quantify the proportion of students with special educational needs, it does provide supports for such students. For example, an extensive programme of supports is provided by the City of Dublin VEC.

Another area which is not the subject of enabling policy to any extent is that of adult or continuing education. This is a large sector in Ireland and is considered to play an important role in overcoming exclusion and marginalisation and in providing a pathway to more formal forms of provision. Some adult education providers (for example, the VECs) are subject to the provisions of broad equality legislation but the lack of specific policy (and it appears also, practice) in this particular arena of education must be considered problematic. Vocational rehabilitation occupies a specific policy space: in the jurisdictions we examined, all of which provide it, such policy is embedded within labour market and social protection frameworks rather than education and training policy frameworks. Ireland is unique among the countries included in this review in not having policy to enable vocational rehabilitation, even though it has ratified the ILO Convention on Vocational Rehabilitation.

It is also clear from the literature reviewed here that even in situations where enabling legislation, regulations and policies do exist, actual practice can fall far short of the legislative prescriptions. We noted this in chapters 3 and 4, for example in relation to transition services and accommodations, differentiated assessment and other supports in higher and further education. In these instances, research has shown, that legislation alone is insufficient to ensure adequate practice and that accompanying measures (such as training for students with disabilities and importantly, for staff, including non-teaching staff) is necessary if the desired outcomes of policy and legislative imperatives are to be achieved. The gap between policy rhetoric and actual practice is highly significant and we return to it in looking at the implications of the review for policy development in Ireland. First, we summarise the main findings of the review.

7.2 Overview of findings

We summarise review findings on measures to support access of adults with disabilities to higher and further education, continuing and adult education, vocational training and rehabilitation, measures to support their participation in these sectors and measures to support their progression to employment and other positive outcomes. Table 16 summarises programmes and approaches identified as effective in these three arenas.

7.2.1 Findings in relation to access

Chapter 3 examined the literature on measures to support access to higher and further education, continuing and adult education, vocational training and rehabilitation. We noted in that chapter that much of this literature related to transition services to enable

students with disabilities to progress to post-school outcomes. These outcomes may include higher and further education, vocational training, employment, community participation and independent living. In some jurisdictions, however, it appears that within the transition process, progression to higher and further education is prioritised, even if the student's wishes are otherwise (Kaehne & Beyer, 2009***a; Heslop *et al*, 2002)***a;. It is not clear why this is the case: whether for example progression to higher or further education is considered the best option in the long term or if it is just considered the most achievable outcome in the short term. This issue does, however, point to the need to ensure that the student (and their family) is fully involved in decision-making and can exercise choice. Despite the legislation and policy in this area, several studies we examined suggest this is not always the case and especially so for people with intellectual disabilities (Mason *et al*, 2004)*.

From the literature reviewed here, it appears that one of the single most effective measures to overcome this is to provide training in self-determination for disabled students at the point of transition (Larragy, 2004***, Trainor, 2008)*. Thus, self-determination training appears key to ensuring effective transition services. Two other contributing elements are also pointed to in the literature. These are (a) good information for students and their families so they can make informed choices (Vickerman & Blundell, 2010)***a and (b) a role for specially trained transition specialists to support the process (Larragy, 2004***, Nuehring & Sitlington, 2003) Vickerman & Blundell, 2010)***b. Studies indicate the need for these to be well trained and well resourced and to operate with appropriate caseloads. It is also established practice for central agencies to resource transition services at local level, through activities such as developing common templates to guide planning and ensuring the transfer of learning and good practice.

In Chapter 3, we noted approaches implemented by institutions of higher and further education to promote access for students with disabilities. These included approaches based on universal design and measures targeted exclusively at individuals with disability. The key element of the former was use of websites and online resources both as outreach to disabled students and as resources to assist in the application process (CDS, 2009)**a. Specific examples include the provision of comprehensive information in accessible formats and the establishment of virtual open days. No extensive body of evaluation material exists on this from which to draw emphatic conclusions, but available research suggests these types of approaches are welcomed by students with disabilities and facilitate the application process (CDS, 2009**a, Thompson et al, 2010)**a. Ongoing monitoring and research will be important in ascertaining the relevance of these types of approaches in the coming years and could also play a role in helping to transfer these models to other sectors.

The second type of approach utilised by higher and further education institutes related to modified selection and enrolment practices, which often include differentiation of application processes such as those noted above. Again, there appears to be no critical mass of evidence for this type of approach, but examples from the UK (Davis, 2005)**a and Ireland (the DARE Initiative) provide some evidence of effectiveness. The potential of this type of measure to be targeted at students with specific disabilities – for example

sensory disabilities – could be examined to increase participation by under-represented groups.

Alternative access routes to higher and further education were also looked at. In Ireland, these programmes, such as PLCs and Access programmes form part of mainstream provision and are availed of by both school leavers and adults and the numbers participating have increased steadily (CEDEFOP, 2011). Comprehensive data on participation of people with disabilities in these forms of provision are not available. But available data suggest Access programmes in Ireland are effective in assisting adults with disabilities to progress to higher education. It is also recognised that these types of programmes may also cater for those with hidden disabilities (ESRI, 2006)**a.. More data are needed to identify fully the impact of alternative access routes on students with disabilities and to highlight the specific elements of these which contribute to their success. For example, more information is required on the nature of the disabilities and impairments experienced by students availing of access courses in Ireland and those that progress to higher education, the destination (in terms of course level and content) of those progressing, their ultimate success or otherwise in higher education and crucially, the precise elements of provision on the Access courses which were most effective in assisting them to make the transition to higher education.

Another mechanism to support access to education looked at in Chapter 3 and explored in more depth in the case studies is that of inclusive education for adults with intellectual disabilities. This model, although usually located within a third level institution, has more in common with adult education approaches that emphasise personal development, acquisition of social skills and greater self-determination. The key principle of these inclusive models is that supports are based on the needs of individuals, and the outcomes are based on their aspirations, abilities and individual objectives (Uditsky & Hughson 2007)**b. Currently, such a model is being implemented in NUI Maynooth (Noonan, 2012)*. Many elements of this approach, however, could be considered appropriate within other continuing and adult education contexts, including the informal sector. Consequently, the learning from these approaches could be potentially beneficial in supporting development of measures to enable people with disabilities (and particularly intellectual disabilities) to participate in other forms of adult and continuing education and could also help to develop pathways to other education and training sectors. For example, for adults with intellectual disabilities in particular, literacy problems are recognised as presenting a barrier to participation in education and training (Mirfin-Vetch, 2003)*. In the Irish context, this leads to an unfortunate paradox: on the one hand, a great deal of adult education programmes in this country are in fact literacy programmes; on the other, it seems that adults with intellectual disabilities, who could benefit greatly from these programmes, are not participating, and their lack of literacy may be a contributing factor to this1. Given the role that adult education can play in overcoming social exclusion and in acting as a bridge to other forms of provision, enabling access to literacy programmes warrants consideration.

More generally, the whole area of adult or continuing education for those with disabilities is poorly reflected in the literature. Interestingly, one of the few studies

¹ The work of the National Adult Literacy Association (NALA) in this area has already been noted.

dealing with this asked adults with a variety of disabilities what supports they needed to participate in adult education (McLean et al, 2008)*. The study also found that these adults identified peer support programmes as a measure that could facilitate their access to adult education. But they also cited other supports similar to those already in place in higher education institutes and this suggests again the potential to transfer learning and practice across the different educational sectors.

In vocational training, we found limited examples of measures to support access to this sector by adults with disabilities and particularly access to inclusive vocational training. From the available literature, it seems that segregated pathways to vocational training do not, in general, produce positive outcomes (Wright, 2006*, Gebhardt et al, 2011)***a. In Ireland, the disconnect between educational and adult services has been cited as a contributor to this. Internationally, policy emphasises inclusive vocational training for adults with disabilities but within the literature the emphasis is on overall frameworks to achieve this, rather than on specific measures or interventions. However, in Chapter 3 we noted an Australian initiative to increase the participation of adults with disabilities in vocational training including apprenticeships, and we elaborated on this in the case studies. The outreach strategy of this initiative, along with the partnership model which incorporated disability organisations, proved particularly effective in enabling trainees and apprentices with disabilities to avail of training. More generally, where successful interventions to support access to vocational training were identified, these involved a structured approach to enrolment and carefully implemented pre-enrolment measures, including vocational guidance. Although the body of evidence on these measures is somewhat limited, the extremely low participation of people with disabilities in mainstream vocational training in Ireland suggests these elements should be considered in the context of policy and practice development.

Finally, we were surprised to discover that two themes did not appear to any extent within the literature. These were first, a reference to participation costs and the impediment to accessing education and training that these could present. Second, there was no discussion of administrative barriers to participation particularly in relation to vocational training for people on welfare payments. Both of these were included in the WHO's recommendations for vocational training in its recent report on disability (WHO, 2011). Specifically, the WHO argued that mainstream social protection programmes should not create disincentives for those with disabilities seeking employment. Bogard (2007) and the Disability Federation of Ireland (DFI, 2009) echoed this sentiment.

7.2.2 Findings in relation to participation

Chapter 4 looked at literature on measures to enable people with disabilities to participate in higher, further, adult and continuing education, vocational training and vocational rehabilitation. Below, we summarise the findings for higher and further education first. These sectors have seen a huge proliferation of practice and innovation on the past decade. The result is that currently, in most if not all institutions of higher and further education, a wide range of measures are being delivered simultaneously to support this population. These include disability support services; accommodations; differentiated assessments; the use of ICTs; and universal design in learning. A

consequence of the co-existence of these measures is the occasional difficulty in identifying the specific impact of any one. In addition, limitations within the literature make it unwise to draw emphatic conclusions from some studies reviewed here. Overall, though, we can state that while progress has been made in participation, challenges remain. Students with disabilities still face difficult situations and some categories, such as those with sensory disabilities, may be excluded. Noting these points, however, key findings were identified from the literature, as discussed below.

Disability supports services are now widespread across higher and further education institutes and different models have emerged in different contexts and this is evident in Ireland too. Despite the different approaches, the supports of disability services display some consistency. Research data show variability in how effective these services and supports are judged to be by students with disabilities, but in general they seem positively evaluated. The studies reviewed here suggest that to maximise their effectiveness, disability support services must be embedded across the institution, be well resourced, be based on actual rather than assumed needs and should cater for the social as well as the educational needs of students with disabilities (Taylor, 2005***a, Dowrick et al. 2005)***a

The available research also suggests the importance of ensuring that adults with disabilities have choice and a degree of control in the design and delivery of support measures (Brockelman, 2011)**b. Particularly for differentiated assessments and accommodations, the literature suggests these are more favourably evaluated when students have a role in initiating or choosing them. Indeed, the need for and benefits of consultation with students, both individually and collectively, frequently emerges within the literature. An important and effective enabling measure for student choice and consultation is that of self-advocacy programmes (Getzel & Thoma, 2008***, Brown et al, 2010)*** These are similar in objective to self-determination programmes noted above for access and are frequently delivered through mentoring approaches. Self-determination or self-advocacy programmes impart a range of skills to students to enable them understand their disability and its impact on learning, direct their learning plans and self-advocate for accommodations (Getzel & Thoma 2008***, Nichols et al, 2002)***.

Developments are also ongoing in universal design in learning/Instruction. Although even its keenest advocates are cautious not to overstate the impact of this approach, and point to a lack of conclusive empirical evidence of its effectiveness, the indications are positive and the research base is developing. UDL is strongly focused on teacher training and the literature shows that even a little training can have a notable impact on the learning experience of students with disabilities (Roberts *et al*, 2011**b, Schelly 2011)**a. There is clearly a case for ongoing monitoring of developments in this area and for continual assessment of the impact of universal design and its potential for replication in the Irish context. A key challenge for the adaption and implementation of universal design is to ensure that innovations are fully inclusive of all categories of disability, or given that this is difficult to achieve, are complemented by targeted measures to address specific needs.

The Teachability case study highlighted an example of this latter approach. Its lecturing staff were trained and resourced to audit the accessibility of their own courses and to

take the necessary steps to improve this. The approach also requires identifying and addressing specific obstacles that arise for individual students. Over and above the transfer of learning, the literature also indicates that staff training and awareness are necessary for the successful implementation of other measures. There is almost total unanimity in the literature that without adequate staff training, support measures will be poorly implemented if implemented at all. Staff training may be focused on pedagogy matters such as appropriate teaching styles, or it may be focused on the legal and policy requirements impinging on higher education institutions. The research also suggests that even modest training can have a beneficial impact on staff awareness, attitudes and teaching practices. Ensuring that all relevant staff in higher and further education institutions are appropriately trained, therefore, is an important aspect of the overall pattern of provision to ensure equality of participation for students with disabilities.

The use of ICTs in education and training for people with disabilities is also developing at a fast pace. In the future, these could become more significant in supporting access and participation in education and training as the concept of the smart campus becomes more practical and achievable. As noted in Chapter 4, much of the literature in this area relates to the more technical aspects, such as adapting software etc, and was thus not discussed to any extent in this review. But, the literature makes clear that this is an area of innovation to be kept at the forefront of research and it is worth noting that UNESCO has called for the development of policy frameworks to support the use of ICTs in education of people with disabilities. It is likely that international good practice in this body of policy will emerge in the coming years and this could be helpful in informing such policy developments in Ireland.

No evidence of support for disabled adults to participate in further education (as understood in the Irish context) or in adult and continuing education was found within the literature. It may be, in the Irish context, that examples of good practice are in place. There appears to be a need for research to establish current practice, or alternatively to identify the potential for the development of good practice in this area.

Measures to support adults with disabilities to participate in vocational training are also limited within the literature, and possibly also in practice. An exception to this is literature on segregated training provision for adults with disabilities but here studies suggest (not unanimously) that this type of approach is not effective. Against this backdrop, inclusive models of vocational training are advocated internationally, but few examples of such models are evident within the literature. We noted the main models in place including mainstream vocational, on-the-job, apprenticeship and employment-based training. Again, the Australian apprenticeship and traineeship project (already referred to) was noted as successfully supporting adults with disabilities throughout their participation including in learning in classroom settings and on-the-job experience. It achieved this by ensuring apprentices were placed in the right apprenticeship with the right employer and by supporting them on and off-site for the duration of their course (Lewis et al, 2011a***; 2011b***). This project was also implemented in the context of a comprehensive nationwide strategy to increase the numbers of apprentices with disabilities (Bridging Pathways, 2000) Given the very low participation of this population in mainstream vocational training in Ireland, the elements of this approach deserve some consideration. Many international reports examined in Chapter 4 recommend system level frameworks - such as that implemented in Australia - to support the participation of adults with disabilities in vocational training. The types of frameworks recommended incorporate a wide range of elements from the provision of assistive technologies to adequate financial supports within an appropriately facilitatory policy context. This international literature also draws our attention to the extent to which ensuring the participation of people with disabilities in inclusive vocational training is unlikely to be achieved by the actions of training providers alone. Instead a much broader approach will be required to ensure that all barriers (including administrative) to participation are removed, as advocated by the WHO (2011)xx. Among the elements necessary for inclusive vocational training identified by USAID (2009)^{xx} were the involvement of disabled people in all aspects of the system including design and development of programmes and the hiring of disabled people as teachers and trainers; the elimination of all barriers; a market driven approach that ensures the quality of training and maximises employment outcomes; adequate resources and a recognition of the importance of cultivating positive attitudes on the apart of staff and non-disabled students. The example of the Australia strategy referred to above is relevant here. The national strategy was implemented to increase participation of people with disabilities in mainstream vocational training through a dual approach. First, it focused on providing flexible and responsive client focused training based on the needs of individuals; and second it focused on equipping the vocational training sector with the skills to provide inclusive training. Although the outcomes were ambiguous (Bagshaw & Fowler, 2008), the strategy presents an example of the type of structured approach required to engage with the multiple challenges faced in promoting inclusive vocational training.

Finally, Chapter 4 reviewed the findings for supporting participation in vocational rehabilitation. This is defined specifically as a case managed, multi-disciplinary approach incorporating elements or services. Its cornerstone is that it is delivered by a specialist who co-ordinates the services required by the individual and also works with that individual to develop and implement an employment plan (Chamberlain *et al*, 2009***, Elliott and Leung, 2004)***. In the US, this specialist is referred to as a counsellor and providing advice, counselling and guidance is a key element of the role in all jurisdictions. Other key elements of the vocational rehabilitation model are that it is multi-professional, is based on the needs of the individual and involves consumer choice. The case study of vocational rehabilitation within the US presented in Chapter 6, highlights the individually focused nature of this form of provision and the emphasis on job placement. Indeed, the direct linkage to employment was considered key to its success. So too was the per capita funding available to support participant employment plans.

7.2.3 Findings in relation to progression

In Chapter 5, we looked at the more limited literature available relating to measures to support progression from higher and further education, vocational training and vocational rehabilitation. The very considerable variation between the range and prevalence of measures to support transition from compulsory education and the much more limited measures to support progression from other education and training sectors is remarked upon in the literature. It does, however, appear that awareness is growing

of the need to provide progression supports to students with disabilities to assist them in the transition to employment and other post-education and training outcomes. This is reflected in the international literature where some attention is now being paid to this issue but as yet there are few studies which provide precise details on the types of interventions being implemented.

Within the higher education sector, two approaches were identified within the literature. These were training in career focused self-efficacy and the establishment of direct links between the educational provider and the world of work. Frequently these approaches are delivered in tandem or sequentially. Within the former approach, students with disabilities are provided with training and mentoring to enable them identify and take control of their own career path (Kaehne & Beyer, 2009***a, CDS, 2009***a, Stumbo et al, 2010)***. In this respect, what is called career focused self-efficacy is very similar to self-determination and self-advocacy as discussed in relation to measures to support access and measures to support participation. This again draws attention to the value of placing the student at the centre of decision-making and planning for their own student journey (Stumbo et al, 2010)***.

The second type of measure to support progression from higher and further education is where structured linkages are developed between the educational institution and employers. This can take a number of forms: for example progression supports can commence before or immediately on completion of the course; or they can involve internships or shorter durations of work placement. But the common objective is to overcome barriers to progression that may arise at the point of leaving higher education. These barriers can include a lack of know-how on the part of the student in seeking and applying for employment or limited knowledge about what is available in the local labour market. But barriers may also include reluctance on the part of employers to recruit a candidate with disability. A barrier such as this, cannot be removed by interventions targeted only at the person with disabilities and demonstrates the need for strategies to address employer reluctance. In Ireland, the WAM Initiative, implemented by AHEAD has developed a body of practice in this area.

These two approaches appear to be more prevalent within the higher education sector than within the further education sector. We found no examples of measures to support students progressing from this sector in Ireland. This may reflect a lack of literature rather than practice, but it does highlight again the need for more research into good practice in the further education sector in Ireland and for mechanisms to share good practice within this sector and to transfer good practice from other sectors.

In relation to vocational training, we identified three types of measures currently in place to support progression from training to employment. The first of these are broadly focused progression supports delivered before completion of the vocational training programme. In this model, participants are provided with interventions to impart interview skills, job search skills and in some models, careful job-matching. In many respects, this approach is similar to that described above in the higher and further education context. Job matching is a particularly important element of this approach as is high quality vocational guidance (Hillier *et al.*, 2007)***. Indeed, there is some

evidence in the literature that vocational guidance is effective at all stages of the student journey, although it tends to be restricted to the progression stage, if it is available at all.

The second type of approach within the vocational training sector involves use of disability employment services. The function of these is to seek and negotiate job opportunities for people with disabilities and in so doing to overcome employer prejudice and provide support to employees and employers before and after the job placement (Timmons *et al.*, 2009***a, USAID, 2009)**x. In some instances, the agencies involved may be disability-specific (as in the Australian system) in other cases, they may be inclusive providers. We also noted the emerging trend for peer-support in this regard. The important aspect of disability employment services is that they can advocate specifically for disabled candidates who otherwise might be overlooked in favour of those without disabilities.

The third approach relates to the role of employment trial models. These, similar in some respects to supported employment, aim to provide the disabled adult with an opportunity to demonstrate their capacity in real work situations and in this way help to assure employers of their suitability. Ireland has a track record in this area, and was identified by the ILO (2011) as being to the forefront in implementing employment trial models as a form of entry to the open labour market. However, some concerns were noted about the use of this model for people with intellectual disabilities in that they frequently failed to progress beyond entry level and that the low expectations of employers placed a ceiling on their potential (McCormack & McRae, 2005). For this type of approach to be effective, it is important that careful selection and job-matching are in place, that guidance is available to both the disabled employee/trainee and their co-workers and that any assistance necessary to adapt the workplace is provided (ILO, 2011).

In Chapter Five, we also examined the literature for vocational rehabilitation programmes. Within these, as we noted, job placement is usually integral to the overall rehabilitation service and central to its effectiveness. In vocational rehabilitation models, which are individually focused, a case is not considered to have been successfully closed until the client has entered, or re-entered, employment and maintained that employment for at least 90 days. The measures implemented to achieve these outcomes are varied, and as we noted, determined by the needs of the individual clients. However, the research suggests that job placement services are critical. These services may include some of those already noted above and this highlights the comprehensive nature of vocational rehabilitation. Thus, job placement services can involve training in interview skills, CV preparation, job matching, job trials and employment services, all tailored to the needs of the individual. In Chapter 5, we noted that the WHO (2011) recommended that mainstream vocational guidance be made accessible to people with disabilities and that mainstream employment services be made available to them on an equal basis with other job seekers. The WHO also argued for the development of services tailored to individual and community needs rather than services of a 'one size fits all' nature. Currently, vocational rehabilitation programmes are not a feature of provision in Ireland. But, the potential to transfer learning and good practice from these programmes to other sectors, along the lines recommended by the WHO should be evident.

Table 16: Summary of effective interventions

Stage	Sector	Intervention	Evidence Base	Key Factors Associated with Success
Access	Higher and further education	Transition services	Critical mass* US Canada Australia	Young person and family involved Self-determination training Good information Transition specialist
	Higher and further education	Differentiated application process	Several interventions UK Ireland	Outreach Good information Simplified application process
	Adult and continuing education	Inclusive education in university settings	Critical mass* Canada	Adult pedagogy Mentors
	Vocational training	Inclusive apprenticeship training	Single intervention Australia	Outreach to participants Role for disability organisations Direct approach to employers
Participation	Higher education	Self-determination	Critical mass US	Mentoring Skills to self-direct
	Higher education	Universal design in learning	Critical mass US	Teacher training
	Higher education	Auditing of courses and curricula	Single intervention UK	Staff involvement in auditing Focus on practical issues
	Vocational training	Inclusive apprenticeship training	Single intervention Australia	Removal of barriers Ongoing support
Progression	Higher education and vocational training	Progression supports embedded in training/education programme	Several interventions Multiple sites	Direct link to employers Vocational guidance Practical support with job matching, interview preparation etc.
	Vocational training	Disability employment services	Several interventions Multiple sites	Dedicated services Advocacy on behalf of candidate Direct link to employers
	Vocational rehabilitation	Case managed, client centred approach	Critical mass* US	Adequate funding Career guidance Job planning

^{*}Sources cited are indicative of critical mass of literature in this area

7.2.4 Generic findings from case studies

In Chapter 6 we presented the case studies which were selected on the basis of the finding of the literature review. Consequently in many respects the case studies amplified the findings of the literature review summarised above. The case studies, while drawn from different educational and training sectors and different policy contexts, also have several common features. These display the effective and generic elements of programmes, which we believe can be transferred across the different educational and training sectors. These generic features are noted below.

- Clear understanding of what is meant by inclusive education or inclusive training:
 The case studies examined in Chapter 6 have in common a clear, robust and explicit understanding of what is meant by both terms.
- Clear targets and objectives: The programmes examined in Chapter 6 display clear targets and outcomes. Frequently, those outcomes are set with reference to progression rather than participation. For example, the self-determination programme for STEM students has as its objective their ultimate progression to employment in the STEM area, rather than simply completing their course of study.
- Identifying and removing barriers: These measures are also based on identifying
 and removing barriers to access, participation and progression for adults with
 disabilities: in this way they are strategically engaged with the environment
 (including the potential for prejudice in the labour market environment) and are in
 tune with the social model of disability.
- Client-centred approach within an overall inclusive context: The material in Chapter 6 reveals the extent to which these measures take a client centred approach, based on the needs of the individual and ensuring that these needs are met within the overall context of an inclusive model. In some instances this client centred approach complements a system-wide intervention. This approach is important in avoiding a one-size-fits-all scenario.
- Individual education and progression plan: The development of plans for each individual to guide their participation in education and training and to assist in their progression to employment is a feature of a number of the interventions case studied.
- Empowerment: The measures are based on interventions to empower the individual
 to contribute effectively to their own student journey. This can occur either explicitly
 as in self-determination models or through the provision of greater consumer
 choice.
- Natural supports and peer supports: The mobilisation of natural and peer supports
 (in the providing institution, such as fellow-students or co-workers, or in the broader
 community context, such as family and friends) is frequently a feature of these
 models.
- Interagency approaches: The extent to which meaningful interagency approaches
 contributed to the implementation of success of these measures is also clear. These
 approaches include sharing resources, collaboration at the planning stage and co-

ordinated service delivery. A significant aspect of these interagency approaches is that they are designed on the basis of the objectives of the measure and to achieve these objectives: in this respect they differ vastly from interagency models which are established without clear objectives.

- Provision of high quality guidance: This is a common feature across measures and for the most part is available to students at all stages of their journey from access through to progression. Careful job matching is a valuable dimension as is postplacement support.
- Transfer of practice: Finally, it is worth noting that a number of the case studies
 examined in Chapter 6 are the result of successful pilot projects having been
 mainstreamed or replicated in other settings. This points to a willingness within
 the policy-making domains in these jurisdictions to learn from and be influenced
 by good practice and to ensure that this can be reproduced for the benefit of larger
 numbers of adults with disabilities. However, it also has to be borne in mind that the
 transfer of practice, particularly newly generated practice within a project format,
 is challenging and not immediately replicable and sustainable within a broader or
 different context.

7.3 Policy and Practice Issues in Ireland

Ireland shares many policy priorities on disability with other countries examined here and also many examples of innovative practice. Irish policy is influenced by the same international frameworks, although Ireland has not yet ratified the UN Convention on the Rights of Persons with Disabilities. As in other jurisdictions, disability issues are covered by broad equality and disability specific legislation. Disability issues are also addressed in economic strategy documents and targets set within this context. To date, not all the provisions of disability legislation have been implemented. Elements of all three of the key Acts underpinning the National Disability Strategy have yet to be activated and difficulties presented by the current economic climate have been acknowledged here. As a preface to the discussion below, we note again here that this was a review of literature not practice.

The literature review has highlighted the range of practice in place to support adults with disabilities into, through and beyond higher education. In Ireland too, there are many examples of innovation in place, some of which have been discussed in this review. Positive outcomes from this are evident in the increase in the proportion of students with disabilities entering higher education institutions, albeit with some ongoing concerns about the under-representation of certain categories of disability (HEA, 2013).

Further education displays a less positive picture, with overall low levels of participation evident in those programmes for which we have data (NDA, 2004). It may be the case that much undocumented good practice exists within further education, but the lack of good data in this area is problematic and warrants attention.

The same point holds for adult education. In Ireland, this is almost always community based, is frequently delivered by community organisations and operates with a particular adult education ethos. In the Irish context, low numbers of adults with

disabilities participate in this sector. It seems many benefits are to be derived from an adult education approach for people with disabilities to both increase their social participation and also to lead into more formal forms of education and training.

Mainstreaming of people with disabilities in vocational training is a stated policy objective in Ireland. Yet participation in mainstream vocational training is problematically low at just 3 per cent (NDA, 2004). In some areas of provision, the percentage falls below even this level. It seems little progress has been made in this area and most people with disabilities who avail of vocational training in Ireland do so in segregated provision. But it appears such segregated vocational training leads to poor employment outcomes, as evidenced by the most recent available data from FÁS.

Overall, the data from Ireland suggest that if people with disabilities do not manage to secure third level education and/or progress to stable employment on leaving education, they will subsequently experience great difficulty in availing of education and training and in entering the labour market. Data on the unemployment rate of people with disabilities bear this out. Bearing in mind that most disability is acquired, this also suggests the need for interventions for adults which are not part of the trajectory for school leavers. Research indicates that adults who acquire disabilities are also at increased risk of unemployment, low rates of pay and downward occupational mobility. This is the target group for most vocational rehabilitation programmes. Currently, Ireland does not have in place the type of vocational rehabilitation programmes that exist elsewhere. These issues are set to become critical in the future: as more children with special educational needs become included in mainstream education, their participation in further education, training and transfer to the workplace will become much more of an issue (NCSE, Implementation Report [2006]).

Currently quite significant developments are under way in Ireland in relation to mainstream further education and vocational training. These include the abolition of FÁS and the VECs and their replacement with local agencies to be known as Education and Training Boards which will have responsibility for what is generally referred to as the FET sector in Ireland. In addition, a new agency, SOLAS, is being established to oversee funding and direction in the FET sector. These represent a major reform and are occurring in the context of high unemployment and a crisis in public finances. Disability specific policy must be formulated within this ongoing context. Consequently, it will be important to ensure that the new systems and structures are compatible with inclusive approaches, notwithstanding the difficult economic and labour market environment.

More generally more research is needed into good practice in the further and adult education sectors and in vocational training. More research and information is required on current practice in Ireland on access routes, supporting participation and facilitating progression. A more concerted effort is also required to ensure that such good practice as exists is brought into the public domain.

Bearing these points in mind, below we discuss the implications of the findings of the literature review for the development of policy and practice in Ireland for effective measures to support people with disabilities in higher, further, continuing education, training and rehabilitation for adults.

7.4 Implications of Findings for Irish Policy and Practice

In this section, we discuss the implications of the literature review for the development of overall approaches to measures to support the participation of adults with disabilities in higher, further, continuing and adult education, training and rehabilitation. We look at specific policy and practice issues here including legislative and governance considerations, the development and deployment of personnel, institutional issues, the involvement of people with disabilities and the development of specific interventions.

7.4.1 Legislative, governance and administrative considerations

As noted above, a considerable degree of convergence exists between Irish legislation on disability and legislation in other countries with broadly similar policy environments. It is clear from the literature review that policy alone is insufficient to ensure effective practice is implemented. We re-emphasis this point here as it pertains to one of the most significant factors in the development of policy: that is the need to recognise the potential disjuncture between the high level objectives as formulated in policy and legislation, and practice on the ground. This is of relevance to almost all areas of public policy but it also tends to be overlooked. In this context, it is important that bodies which have a role in advising on policy matters (including the NDA and the NCSE) are continuously and fully apprised of the reality through effective monitoring, systematic evaluation and consultation. This is particularly pertinent given the roll out of the new ETBs at local level.

Effective monitoring requires good data collection. Internationally, there is consensus that the development of policy and practice in education and training for people with disabilities is hampered by a lack of good data and in some instances any data at all. In Ireland too, this is the case, and despite explicit targets being set in recent policy documents, deficits in data collection remain. This is particularly problematic in further and adult education. If this lack is not addressed, development of effective policy and practice will be impeded. Again, developments in the FET sector provide an opportunity for a more concerted approach to data-gathering than has existed heretofore especially in the further education.

Currently, it appears that in Ireland's higher education sector, considerable innovation and development of practice are evident. But it is not entirely clear to what extent mechanisms are in place to support the transfer of learning across institutions. There is evidence of effective collaboration but further opportunities to collaborate and streamline services for adults with disabilities could be explored. The work of AHEAD in higher and further education in supporting the transfer of good practice is relevant here. But given the challenges of meeting the needs of students with disabilities, notwithstanding the often considerable efforts to do so, it is important that mechanisms are there to ensure that evidence-based practice can be identified and disseminated across institutions.

There is also a case to be made for the transfer of learning across sectors including across education and training. This is not unique to Ireland in that in many jurisdictions it appears that there is a very limited extent (if any) to which effective practice developed

in an educational sector is replicated in the vocational training sector and vice versa. This is regrettable, not just because it reduces efficiencies overall but because it inhibits the incorporation of elements in which one sector is particularly strong into another sector which may have weaknesses in that area. Based on the findings of this review, for example, it would appear that the vocational training sector could have a lot to learn around supporting access by disabled people from the higher and further education sectors.

The establishment of SOLAS to oversee the FET sector, which will parallel the work of HEA in relation to higher education, raises the possibility of collaboration at high level between the two sectors with a view to exchange of practice and learning.

The transfer of effective practice leads us to another area of consideration. This is government funding to promote innovation in areas recognised as being in need of development. Such funding could target specific measures (for example inclusion of adults with disabilities in adult education) or it could target approaches (such as multi-agency models). Effective measures discussed in this review (some of which were presented in more detail in the case studies) were the result of successful pilot projects being mainstreamed. Over the years, various EU initiatives (for example, the EQUAL Initiative) have successfully fostered innovation in disability. Currently, as noted in Chapter 2, the Disability Activation Project DACT is being implemented and may generate significant learning in supporting young disabled people into vocational training. To capture the full value of learning from innovative practice, however, it is necessary that mechanisms are in place at departmental and agency level to ensure that mainstream policy and practice development can be influenced and shaped by the learning generated.

Finally, it is important that when developing both strategies and provisions institutions focus strongly on environmental barriers across all aspects of provision. An area that can present serious obstacles to participation is that of administrative barriers. In vocational training, particularly vocational training for unemployed disabled people, administrative barriers relating to age, duration of unemployment, welfare status, educational attainment and so on can obstruct participation. Removing these is a necessary prerequisite to ensuring that the objective of mainstreaming is achieved, as noted by the Disability Federation of Ireland: 'Mainstreaming will remain an aspiration so long as the focus is on whether a person meets the programme eligibility criteria rather than on ways to enable the person to access the programme' (DFI, 2009 p4).

7.4.2 Development and deployment of personnel

An important issue highlighted at several points in the literature review was that of the role of staff within providing organisations in ensuring that measures were implemented fully and appropriately (Vickerman & Blundell, 2012)**a. Staff in this context include disability service providers, academic teaching staff, trainers and other relevant personnel. Studies we looked at highlight the negative impact which untrained staff can have on the implementation of measures, and the positive impact that even minimal training can have on improving this situation (Roberts *et al*, 2011**b, Schelly, 2011)*. Training here relates to areas we noted above including disability awareness, curriculum

development and legal obligations. The challenges of ensuring that all relevant staff within an institution are appropriately trained are not insignificant but must nonetheless be addressed. In particular, the need to train staff within mainstream vocational training settings and mainstream employment services should be given some attention. The WHO (2011) has argued that vocational guidance and mainstream vocational training must be made accessible to those with disabilities on an equal basis to their non-disabled peers. The findings of this review suggest that for such an approach to be meaningful, the relevant staff should be adequately and fully trained in all necessary aspects.

A second issue in relation to the development and deployment of personnel is the role of specialist occupations within the provision of education and training to people with disabilities. This has arisen in a number of areas within the literature review. First, transition service specialists are in place in some jurisdictions (Larragy, 2004)***. These personnel are trained specifically to co-ordinate and facilitate the transition planning and implementation process. As noted earlier advocates of this approach have argued that such personnel must be adequately trained, properly resourced and operate with appropriate caseloads.

A second area where specialist personnel are deployed is that of vocational rehabilitation (Chamberlain *et al*, 2009)***. These are in effect case managers although they may be referred to differently in different national contexts. To some extent, this different terminology reflects differences in the professional development of these key personnel. In the US occupational psychologists have been at the forefront of service development in this area. In the UK, labour market guidance experts play the major role. Regardless, the key point here is that these personnel ensure that high quality guidance is available to adults with disabilities and that it is available at all points on their learning journey: that is at the point of access (to enable them make informed choices about the most appropriate course of study or training) during participation (to facilitate ongoing career planning and at the point of progression (to underpin the move to employment and reinforce career efficacy).

The role of specialist personnel cited above for transition and progression highlights an important feature of effective interventions: that of resourcing the disabled person with good quality information and guidance at all stages of the student journey. The most significant element here is career or vocational guidance. Currently and as we noted in the body of the report, it appears that guidance for transition is available to students at the point of leaving school, but guidance at other stages appears to be patchy at best. Attention is turning to this internationally, particularly in relation to progression from vocational training programmes. Important lessons are likely to be generated in the future and Irish policy should take account of these. Without policy intervention it is unlikely that the very low rates of progression to employment among those leaving specialised training programmes will improve, particularly in the current economic climate.

The possibility of training disabled people to act as peer educators, or peer trainers (or indeed peer guidance counsellors), was mooted by USAID (2009). We found only two example of this in the literature. One was a model of inclusive training for people

with intellectual disabilities in the US (Kirkpatrick & Earwaker, 1997). The other was the Building Futures project in Dublin. This latter provides inclusive training as peer educators to those distant from the labour market and as we noted participants were recruited on the basis of aptitude and interest and included about 20 per cent of people with disabilities. Generalisations from such small scale programmes must be treated cautiously. But given the low participation of people with disabilities in mainstream vocational training in Ireland, the valuable learning of these initiatives should be given due consideration.

7.4.3 Institutional factors

The material examined in this review raises issues that must be addressed at the level of the providing institution. A key issue here is that of ensuring that the total population of adults with disabilities is represented within higher, further, and continuing education, training and rehabilitation for adults. This means ensuring that measures successful in increasing the overall participation of people with disabilities are not systematically excluding a particular category of disability. This can only be achieved with ongoing and fine grained monitoring of the participants in education and training and ensuring that adjustments are made to supports to make provision more accessible to the total population of adults with disabilities.

There is a particular challenge here for institutions to ensure that interventions based on universal design are appropriately complemented by interventions capable of supporting those with specific needs. In effect, this means creating the right balance across universal and specific or inclusive measures and given that the latter is not a constant variable, this is indeed a significant challenge that requires ongoing attention. The establishment of the Centre for Universal Design in the National Disability Authority is progressive in the Irish context and should help to ensure that Ireland stays abreast of developments in this area: again the introduction of the Education and Training Boards may provide an opportunity to establish and disseminate the principles of UDL across the FET sector and to ensure that mechanisms to transfer good practice within the sector are in place.

An additional issue we raised in this review is that of multi-agency approaches. This is a model of working that requires careful consideration: over the past number of years multi-agency working has been widely advocated but rarely has it been achieved in practice. Research consistently shows that these approaches invariably expend great effort on planning and relationship building and very little on co-ordinated service delivery (Duggan & Corrigan, 2010). Moreover, it is important to note that most agency policy is focused on guiding the use of funds around a specific outcome with a specific clientele. Such policies often lead to competition between agencies and make collaboration or braiding of funds across agencies difficult. In Ireland, the Department of Enterprise, Trade and Employment Sectoral Plan proposes greater integration between FÁS and HSE services. However, it appears that this has been very slow to be rolled out (DFI, 2009). Nonetheless, a number of the studies we examined suggest that when properly implemented, interagency approaches can be effective and can lead to positive benefits and outcomes for people with disabilities. Indeed, the vocational rehabilitation

model, which is widely implemented internationally, is in many respects an interagency approach.

Within effective interagency models, it appears that clear understandings of what the objectives are and how to reach them is required and clear statements of co-operation and commitment are also important. It is also apparent that effective models are focused on service delivery on are client centred – based on the needs of the individual participant rather than the providing agency. Interagency models have been used for progression to employment and involve employers. This approach has a number of benefits: it provides a direct link to the world of work; it ensures that the disabled person is facilitated to link directly with employment opportunities; and it can help break down employer prejudice or reluctance about recruiting an employee with disability.

A number of interagency models which we examined incorporate disability-specific organisations in key roles and the part played by these organisations is considered central to the success of the measures. Disability organisations have expertise in areas where education providers and training providers may be lacking. Particularly for outreach and personal support, disability organisations have a distinct advantage. To an extent, this model is in place with FAS specialist training providers, but it could be extended to support participation in mainstream vocational training. The involvement of disability organisations in providing adult or continuing education is also worth considering and there are numerous examples from outside the disability sector that could inform this. For instance, over the past two decades, women's groups and other community organisations at local level have been instrumental in delivering adult education programmes at community level. As a result, there is a wide body of knowledge relating to adult pedagogies that could effectively be used to facilitate greater participation by adults with disabilities in adult and continuing education. There is also a case to be made for engendering greater links between disability NGOs and other NGOs involved in adult education and training.

Again, it is important to stress that the literature shows that interagency models should not be employed for their own sake: they need to be carefully planned and implemented, focused on explicit outcomes and targeted at the delivery of frontline services.

7.4.4 Involving people with disabilities in developing policy and practice

Many of the studies we reviewed refer positively to the role of people with disabilities in the design and delivery of support measures (for example, Brockelman, 2011)**^b. This includes measures targeted at the specific individual as well as those targeted at the level of the institution. In these models, for example transition planning and vocational rehabilitation, the person with disabilities is intended to take an active role in developing and implementing their own transition or progression plan and the concept of choice is central here particularly in relation to vocational rehabilitation. More generally, being able to manage their disability and self-advocate has also been shown to be important in enabling them to maintain their participation on education and training programmes. In Ireland, the Review of Disability Policy undertook a public consultation process on existing services. This showed that, among other things, people with disabilities and

their families want more choice in the services they receive and more control over how they access them. In commenting on the findings of this review, the Citizens Information Board noted that disability services are not being provided in a way that promotes independent living (Citizens Information Board, 2012).

The findings of this review suggest that for people with disabilities to be fully involved in planning and decision-making, it is important that they are supported and facilitated with both the skills and information necessary. An effective way of achieving this is through training in self-determination, self-advocacy and self-efficacy (Getzel & Thoma, 2008***, Brown et al, 2010)***. There appears to be unanimity across national contexts that such training can equip disabled people to identify and work towards their own education, training and employment goals. This measure has been mostly demonstrated within the education sphere, there is considerable merit in transferring this approach to other areas of education and training, including adult education and vocational training. A similar form of provision here is mentoring and particularly peer mentoring. Again, the literature on mentoring is exclusively related to students within the higher and further education sectors. But this approach should be capable of transfer to other contexts without much difficulty.

To summarise the above, and noting the context of the reform of the FET sector currently under way, the following issues are those which, on the basis of this literature review, could be considered in developing policy in Ireland.

- The establishment of rigorous data gathering and monitoring systems across all service providers including the new ETBs. The establishment of the latter provides an invaluable opportunity to ensure consistency of data across the new structures.
- The introduction of mechanisms to disseminate and transfer good practice within sectors and across sectors and to absorb learning from successful pilots. Again, the new ETBs provide an opportunity for the development of such mechanisms within the FET sector. The establishment of SOLAS should also provide an opportunity for links between this agency and the HEA to ensure transfer across sectors.
- The elimination of all administrative barriers to participation in education and training and a recognition of the costs of participation.
- The development and deployment of specialised personnel in supporting all key stages in the student journey including transition, participation and progression.
 The potential for those with disabilities to occupy such roles also warrants consideration.
- At institutional level, there is a need to balance system-wide measures with measures to address the needs of individuals.
- Consultation with people with disabilities can play a role in ensuring that measures
 are delivered in line with legislation and regulations, that unmet needs or gaps are
 identified and that measures are achieving their objectives.

7.4.5 Development of specific programmes

Based on the findings of the literature review, specific forms of provision or intervention are also indicated as warranting consideration in the Irish context. These are transition services, self-determination training, support for participation in adult education, provision of vocational guidance, inclusive vocational training and disability employment services. These are considered below.

Transition services

Transition services for young disabled people at the point of leaving school are not yet formally established in Ireland. Some elements are in place, for example legal provision for individual education plans does exist, within the EPSEN Act, although it is not yet implemented; and the informal supports for transition which may be provided to some students within school settings. The literature examined here, however, suggests that comprehensive transition services can be effective not just in ensuring progression to higher or further education (or vocational training) but also in helping to ensure successful participation in these sectors. It is desirable therefore that legislation be activated to support transition planning in Ireland. It is important to bear in mind that the literature indicates that legislation alone is insufficient to ensure good practice in this area. Transition planning should be embedded in wider transition services and these must be well planned, resourced by a central agency, facilitated by trained staff (including the possibility of specialised transition workers) including the student and their family and importantly and incorporating self-determination training.

Self-determination training

A substantial body of research indicates the effectiveness of self-determination training at all stages of the student journey. Thus the literature highlights its role in equipping students with disabilities with the skills to direct their own transition planning, to negotiate accommodations and supports during participation and to guide their career progression and employment. In view of the extent of evidence on this form of provision, the possibility of implementing self-determination training, at least on a pilot basis should receive some consideration. There are a large number of models in place through which to implement training in self-determination, one of which was detailed in the case studies. Almost all of these pertain to access to, participation in and progression from higher education. But the relevance of this type of approach to supporting participation in all education and training sectors should be recognised.

Facilitating access to and participation in adult education

The gap in practice to support adults with disabilities to participate in adult education has been highlighted in the literature. This appears to be a widespread phenomenon as none of the jurisdictions we examined here offered evidence of effective practice in this area. This gap is particularly problematic given the role of adult education in facilitating social inclusion and in providing a pathway to other forms of education and training provision. In the context of this deficit, the possibility of developing or at least researching the potential to implement programmes to support adults with disabilities

to participate in adult education should be considered. This should include literacy education and second chance education and the extent to which existing community level provision could be made accessible to adults with disabilities should be a particular focus of investigations in this area. The potential of disability organisations and peer supports to play a role in supporting access to and participation in these forms of provision is also worth exploring. The establishment of the new Education and Training Boards may provide an opportunity for innovation in this area.

Vocational guidance

Many of the more effective forms of provision discussed in this review have embedded within them, the provision of quality vocational/career guidance by qualified and specialised personnel. The relevance of this type of provision is also acknowledged by international reports, both in terms of specific provision for people with disabilities or in terms of access to mainstream vocational guidance. Frequently vocational guidance is viewed as a form of provision which is most relevant at the progression stage of participation. But research evidence suggests that (as with self-determination training) giving vocational guidance at all aspects of the student journey is beneficial. It can assist people in deciding on a course of study or training in the first instance; it can support participation by helping to retain focus; and clearly, it is instrumental in supporting a positive outcome from education or training. Vocational guidance should be embedded within training and education programmes and should be available to the participant or students before and throughout their course of study. It is important to stress, that its provision should be undertaken by well-trained, highly qualified and well-resourced personnel, operating with appropriate caseloads.

Facilitating access to and participation in inclusive vocational training: effective vocational guidance is enhanced when there is a choice of relevant, appropriate and accessible training opportunities available to adults with disabilities to enable them progress their career plans. Currently, this is not the case in Ireland as the low participation rate of people with disabilities (3 per cent) in mainstream vocational training highlights. The establishment of the Education and Training Boards may provide an opportunity to address this issue, again at least on a pilot basis. The strategy for the vocational training of people with disabilities, developed by FÁS in 2006 could be reassessed within this new context and steps taken to progress, or further progress, some of the actions contained therein.

Disability employment services

Research suggests the effectiveness of disability employment services linked to training and education programmes in enabling people with disabilities to progress to open employment. Employment services (which incorporate an element of vocational guidance) can be delivered by specialised staff in mainstream agencies, by dedicated disability employment services or by interagency approaches incorporating both of these elements. The roll out of the new Intreo service in Ireland, which will ultimately replace the Local Employment Services, provides an opportunity to ensure that public employment services are fully equipped to cater for people with disabilities.

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Annex 1: Definitions of Higher, Further and Continuing Education, Training and Rehabilitation

Definitions of Education and Training

Before defining the educational and training categories used in this review, it was considered useful to look at definitions of education and training per se to underpin and contextualise the definitions of the specific sectors. In doing so, we must stress it was not our objective to rehearse the long and hotly argued debate on definitions of education. Our intention is to highlight elements of key definitions that are useful for our purposes.

The International Standard Classification of Education (ISCED) was developed by UNESCO to provide a methodological tool that classifies diverse educational systems into standardised levels. ISCED definitions are widely accepted and are used by national and international organisations in collection and collation of statistics. Specific category definitions are looked at later, here we can note that the ISCED defines education as follows: 'Education is understood to 'comprise all deliberate and systematic activities to meet learning needs' (UNESCO, 1997: p3) and involves 'organised and sustained communication designed to bring about learning'. It notes that for educational programmes these are defined 'on the basis of their educational content and are an array or sequence of activities which are organised to accomplish a pre-determined objective of a specified set of educational tasks' (UNESCO, 1997: p4).

This definition is widely used by international agencies including the OECD, UNESCO and Eurostat. In a joint document produced in 2001, these three agencies elaborated on the key elements of education, understood as 'organised and sustained communication designed to bring about learning':

- Communication requires a relation between two or more persons involving the transfer of information (messages, ideas, knowledge, strategies and so on).
- Organised means planned in a pattern or sequence with established aims or curricula and which involves an educational agency that organises the learning situation and / or teachers who are employed (including unpaid volunteers) to consciously organise the communication.
- Sustained means that the learning experience has duration and continuity.
- Learning is any change in behaviour, information, knowledge, understanding, attitudes, skills or capabilities which can be retained and cannot be ascribed to physical growth or to the development of inherited behaviour patterns.
 (UNESCO, OECD, Eurostat, 2001: p28)

As is the case with education generally, no one agreed definition of inclusive education exists, as noted by Winter and O'Raw (2010) in their review of the literature on Inclusive Education for Children with Special Educational Needs, commissioned by the NCSE. The authors along with the Consultative Forum of the NCSE developed a definition based on a combination of the UNESCO (2005) definition and the description included within the Department of Education and Science (2007) Post-Primary Guidelines for Inclusion

of Students with Special Educational Needs. Thus, it defined inclusion in education as a process of:

- addressing and responding to the diversity of needs of learners by enabling participation in learning, cultures and communities.
- removing barriers to education through accommodation and provision of appropriate structures and arrangements, to enable each learner to achieve the maximum benefit from his / her attendance at school (Winter & O'Raw, 2010: p39).

In the European context, the European Agency for Development in Special Needs Education (EADSNE) has defined inclusive education as: '... the presence (access to education and school attendance), participation (quality of the learning experience from the learner perspective) and achievement (learning processes and outcomes across the curriculum) of all learners in mainstream classes' (EADSNE, 2011).

Definitions of training share some of the features of those of education with significant differences. Whereas education may be seen as 'a combination of knowledge, skills and understanding valuable for all activities of life' (UNESCO, 2005), training is most usually specifically associated with the world of work (Ollagnier, 2005). Some training definitions echo the process and objective-oriented description of education advanced by the ISCED. Jarvis (1999) for example, defines training as 'the procedure whereby knowledge is transmitted with an instrumental and operational vision of the learning process and of its expected results' or as 'a planned and systematic sequence of instruction under supervision, designed to impart skills, knowledge, information and attitudes' (Jarvis, 1999). The importance of training for equipping citizens with the skills to live and work in the information society was recognised by the Lisbon European Council in 2000 as was the need to provide specific support for disabled people. Similarly, a European Parliament Round Table on Disability (2012) noted that EADSNE considers vocational education and training (VET) to be an effective way of 'learning by doing and experimenting, but also by conceptualising experience to reach (individually) high levels of knowledge and competences'. The round table stated: 'Vocational education and training stimulates lifelong learning and is inclusive. It is not a kind of second-class education and is therefore a tool for autonomy, which is particularly relevant for learners with special education needs (European Parliament Round Table, 2012: p2).

From this brief overview, we can see that usually these definitions emphasise the generalised process of knowledge transfer. Specific categories of education and training, on the other hand, are more likely to be defined on the basis of specific features of provision (for example its content or the type of providing institution) as discussed later. But we suggest that the generalised elements of the process contained in the previous definitions can also be seen as implicitly present in the specific categories that follow.

Definitions of Higher, Further and Continuing Education, Training and Rehabilitation

The key terms which form the focus of this review are those of higher, further and continuing education, training and rehabilitation. It is frequently acknowledged that these widely used terms are difficult to define and indeed often they are not defined

at all.In addition substantial variation, vagueness and overlap exist in how they are understood across jurisdictions; within jurisdictions across the domains of legislation, policy making and provision; within the literature; and finally across and even within single institutions. In brief, there is no pre-existing consensus-based set of definitions on educational and training categories that we can utilise in this literature review. We therefore chose to develop mutually exclusive definitions that are substantially based on the predominant elements of existing ones, but which also allowed us to construct discrete categories covering the spectrum of education and training provision for adults with disabilities.

Before examining the definitions of these different categories or sectors of educational provision, some points must be noted.

Internationally, the contemporary organisation of the education system and its various sectors reflects the historical development of public education in the western world. For example, the term higher education emerged following the growth of the public university system and mass participation in third level education. Similarly, the expansion of vocational education reflects the shift towards a knowledge-based and skills intensive economy. The development of adult and continuing education has a strong social inclusion dimension and was in many ways driven by social movements, including movements of marginalised communities. In this sense, rather than a set of discrete sectors with clearly defined and separate functions, the education system reflects, to some extent, an ad hoc historical development of changing economic, social and demographic conditions, and this is evident in the definitions.

Following on from the previous point and in contrast to definitions of education and training which emphasise process, definitions of the different categories of education and training examined here tend to be based on specific features of the provision, the providers or the students. Thus, definitions refer to the age or school-leaving status of participants, the nature of the programme provider and the content of provision, its objectives and its location on the qualifications framework. In some instances, this results in tautological or circular definitions, as for example, when further education is defined as provision by colleges of further education.

There is considerable overlap across the terms 'education' and 'training' within the definitions. For example, further education is frequently replaced by the combined term further education and training (FET). Likewise, the term training is frequently embedded in the term vocational education and training (VET). Additional overlap arises in continuing education which is frequently used interchangeably with adult education and lifelong leaning. Within some definitions it is considered to incorporate higher and vocational education and training and sometimes further education.

Finally, given the reference to providers evident in some definitions, it is useful to note the ISCED distinction between formal and non-formal education. According to the ISCED, formal education is 'provided in the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous "ladder" of full-time education for children and young people, generally beginning at age five to seven and continuing up to 20 or 25 years old', although in recent decades this upper age limit has become less relevant. Non-formal (also referred to as informal) education

is considered to be any organised and sustained educational activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place within and outside educational institutions, and cater for persons of all ages. It may cover educational programmes to impart adult literacy, basic education for out-of-school children, lifeskills, work-skills, and general culture. Non-formal education programmes do not necessarily follow the 'ladder' system, and may have differing durations (UNESCO, 1977: p25). In our review, we found few studies dealt with informal or non-formal provision for adults with disability. Thus most of the material examined in the body of this report relates to the formal education and training sectors.

Definitions of Higher Education

Higher education has generally been understood as several different functions. First, the 'teaching function' of higher education has a role in 'preparing individuals for the labour market' (Nyborg, 2003) and, more specifically, in 'the training of highly qualified personnel' (Huffner, 2003). Second, the 'research function' includes the 'generation of new knowledge' (Huffner, 2003) to ensure 'an advanced knowledge base' (Nyborg, 2003). Finally, higher education has a role in contributing to citizenship and personal development (Prokou, 2008).

All three functions are significant for this review, but it is important to note that the relationship between higher education and employability is becoming increasingly dominant, as evident in EU policy and statements (for example, the Bologna Declaration, 1999; Prague Communique, 2001; Berlin Communique, 2003; Bergen Communique, 2005). For their part, governments of EU member-states have generally argued that higher education should become more oriented to the provision of market-related skills in response to the shift towards the knowledge economy (Prokuo, 2008). Participation in higher education is strongly linked to positive socio-economic outcomes, in particular labour market participation and income level: thus, it is particularly important from an equality point of view.

Despite the national and international importance placed on higher education, it remains an area of education which is, in fact, rarely defined. Such definitions as do exist display more unanimity and coherence, however, than those of the other categories looked at here. For the most part, it is defined with reference to it being formal educational provision beyond second level which leads to a primary degree or equivalent. This understanding is seen as more or less synonymous with the terms third level or tertiary education. The latter term is more frequently defined than is higher education but it is important to note that most, if not all, definitions of tertiary education have been developed to aid data collection by international agencies.

The ISCED defines tertiary education programmes purely on the basis of content as 'having an educational content more advanced than those offered at [non-tertiary or earlier] levels'. It further differentiates it into first stage or Level 5 programmes which have a cumulative theoretical duration of at least two years and lead to qualifications similar to a bachelor degree; and a second stage or Level 6 referring to those programmes which lead to the award of an advanced research qualification.

Other agencies further sub-divide Level 5 programmes as follows:

- 'Tertiary education includes both programmes which are largely theoretically based and designed to provide qualifications for entry to advanced research programmes and professions with high skills requirements, as well as programmes which are classified at the same level of competencies but are more occupationally oriented and lead to direct labour market access' (epp.eurostat.ec.europa.eu/statistics_ explained/index.php/Tertiary_education_statistics).
- 'The first stage of tertiary education comprises Level 5a which is largely theoretically based programmes intended to provide sufficient qualifications for gaining entry to advanced research programmes and professions with high skill requirements; and Level 5b, where programmes are generally more practical, technical and / or occupationally specific' (UNESCO Glossary of Statistical Terms and Indicators).

There is also an institutional dimension to definitions of higher education, although this often remains implicit. Most of these programmes are delivered by recognised higher education institutions which tend to be acknowledged in legislation as such. As a result, the area is sometimes defined simply as educational activities taking place within a higher education institute. Higher education is also often implicitly understood as a destination for students progressing from second level schools, although it is recognised that other entrance pathways also exist – for example mature student access.

For the purposes of this review, and following the predominant understanding within the literature, higher education is defined as programmes provided by higher education institutions which lead to degree level qualifications or equivalent. In the Irish context, therefore, it is provided by the university sector, institutes of technology and colleges of education, including State-funded and private colleges. This definition excludes non-degree courses of these institutions.

Definitions of Further Education

Definitions of further education are more common in the literature than those of higher education but are far less consensual. A significant area of some consistency – and a feature shared with higher education – is that it tends to be seen as a progression destination for those leaving second level school, including those leaving early. In this respect, it is sometimes seen as an alternative to or a route into, higher education.

The ISCED does not refer to further education at all, however it does classify what it calls 'non-tertiary post-secondary education' as consisting of 'programmes that straddle the boundary between upper-secondary and post-secondary education from an international point of view, even though they might clearly be considered as upper-secondary or post-secondary programmes in a national context'. More generally, definitions of further education stress that it is post-compulsory education at pre-degree level.

Thus, the Higher Education Funding Council for England defined it as follows: 'Further education is for people over compulsory school age which does not take place in a secondary school. It may be in a sixth-form college, a further education college or a

higher education institution. Such courses are generally up to the standard of GCE A Level or NVQ Level 3' (www.hefce.ac.uk/glossary/#letterF). Individual colleges in the UK take a similar approach: for instance, the New College Durham states: 'Further education covers the types of education which go beyond what has been achieved in compulsory education but which are not at degree level' (www.newcollegedurham.ac.uk).

For the most part therefore, it shares with higher education the feature of being a progression destination for school leavers but is differentiated in that it is not considered tertiary. Further education is also differentiated from higher education on the basis of content, objectives and sometimes the providing institution. In some jurisdictions however this differentiation does not hold, most notably in the US case, where community colleges which offer two-year non-degree programmes are considered to be higher education institutions and their programmes tertiary (OECD, 2010).

Further complexities arise. First, the term further education is frequently linked to that of further training, and both are often referred to in the combined term further education and training (FET). In Ireland, this combined terminology is common. For example, Enterprise Ireland on its website (educationireland.ie) defines further education as follows: 'The term further education embraces education and training which occurs after second level schooling but which is not part of the third level system.' FAS also uses this definition in a number of reports, for example their report on soft skills (FAS, undated). This broader concept minimises the distinction between education and training but emphasises the progression from second level school (including that of early school leavers) in that it is provision 'further' to that delivered by the secondary system.

Second, in some instances, the term further education and training is not confined to progression programmes for school leavers but refers also to provision for adults. Thus it may overlap with the terms adult and continuing education and lifelong learning and indeed that of vocational education and training (VET). For example, FET is mentioned as a sector in its own right in the Irish White Paper on Education (Charting our Future, 1995: p73-74). Here, the term refers to vocational education and training and adult education with specific reference to the Post Leaving Cert (PLC) sector, VTOS and apprenticeships. While school leavers avail of the latter, VTOS is targeted at unemployed adults. PLCs, although initially seen as a progression from second level, are increasingly accessed by those over 20 and 30 (McIver, 2003). This understanding of further education was expanded in the White paper on Adult Education (Learning for Life, 2000) to include adult literacy, basic and community education provision and self-funded night class provision in second level schools and other centres.

In a similar vein, FETAC in its 2005 report on further education and training in Ireland describes the typical features of what is referred to as the 'diverse and dynamic further education and training sector in Ireland' as follows:

- Further education and training programmes typically have a vocational focus and reflect national, regional or sectoral economic needs. Programmes also aim to develop personal skills.
- A vast array of institutions provide programmes including further education centres (second level schools, vocational education committees); FAS, Teagasc, Failte

Ireland and Bord Iascaigh Mhara centres and colleges; professional bodies and the workplace (private and public sectors).

FET programmes are funded by a wide range of sources and the cohort undertaking any one programme does not fit a prescribed profile (in terms of age, existing qualifications etc) (FETAC, 2005: p7).

This broader definition is echoed in the Irish Qualifications Act (1999) which describes further education and training in broad terms as 'encompassing education and training other than primary or post-primary education or higher education and training'. We see a similar approach in the Country Report for Ireland from the OECD project on Pathways for Disabled Students to Tertiary Education and Employment (OECD, undated). This explicitly combines the terms further and adult education and states that such courses are, 'in principle, open to all but the main purpose is to provide a range of supports to people who have left school early or who need further vocational education and training to enhance their employment prospects and to enable them to progress their education up to a standard equivalent to upper secondary level (OECD undated: p22).

From the above, it should be apparent that no consensus or shared understanding exists of what is meant by further education. Indeed, as some examples make clear, it is frequently a catch-all concept incorporating vocational and adult education. On the basis of the previous definitions and notwithstanding their inconsistencies, we can conclude that:

- Further education is most usually (and in the Irish context almost always) considered to incorporate training.
- In some definitions it is understood (implicitly or explicitly) to refer solely to progression destinations for school leavers, in others it incorporates provision for adults.

To develop some clarity on this and to ensure the full spectrum of educational and training provision is referenced in this review, further education is considered in this study as post-compulsory provision which is explicitly but not exclusively linked to progression from the second level system but which excludes degree courses. Examples of further education in the Irish context include diploma and certificate courses provided in third level institutions, provision for early school leavers, such as Youthreach, Access courses and PLCs which are equally availed of by school leavers and adults returning to education (Watson et al, 2006).

Definitions of Continuing Education

Definitions of continuing education vary hugely so that it is almost impossible to determine a specific meaning. Instead the term is used in ways that suggest the content is similar to that of further education and of training as the following examples from the US and UK demonstrate:

Continuing education is 'a course outside the regular academic instructional programme, for which standard academic fees and tuition are usually not charged. While most of these courses do not earn academic credits, they can provide

- community education units necessary for professional development or lead to professional certification' (Northeast Texas Network Consortium, 2002).
- Continuing education students 'are on courses normally lasting less than one year, they are usually part-time. Continuing education can be award bearing or nonaward bearing and vocational or non-vocational' (Higher Education Funding Council for England).

The OECD glossary also makes a distinction between vocational and non-vocational continuing education but defines it closer to vocational training: '[C] ontinuing education and training for adults is defined as all kinds of general and job-related education and training that is organised, financed or sponsored by authorities, provided by employers or self-financed.' The OECD glossary also defines job-related continuing education and training as 'all organised, systematic education and training activities in which people take part in order to obtain knowledge and / or learn new skills for a current or a future job, to increase earnings, to improve job and / or career opportunities in a current or another field and generally to improve their opportunities for advancement and promotion (www.stats.oecd.org/glossary/index.htm).

An area of some consistency within the definitions is that continuing education is understood (either implicitly or explicitly) as provision for adults and not necessarily forming any continuum with second or third level systems. In this respect, the term is sometimes synonymous with adult education and lifelong learning. The OECD, for example, uses the three terms interchangeably. The ISCED also makes explicit the link between continuing and adult education, referring to the combined term of adult, continuing or recurrent education which it defines as: 'The entire body of organized educational processes, whatever the content, level and method, whether formal or otherwise, whether they prolong or replace initial education in schools, colleges and universities as well as in apprenticeship, whereby persons regarded as adults by the society to which they belong, improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose:

- to complete a level of formal education
- to acquire knowledge and skills in a new field
- to refresh or update their knowledge in a particular field' (UNESCO, 1997: p26).

Limiting the concept to adult education does not fully resolve definition difficulties. Knowles (1980) for example identified problems relating to the term 'adult education' itself. This, he suggests, is used with at least three different meanings. In its broadest sense, it describes the process of adults learning (as evidenced in the OECD definition); in a more technical meaning, 'adult education' describes a set of organised activities carried on by a wide variety of institutions for the accomplishment of specific educational objectives. A third meaning combines all of these processes and activities into the idea of a movement or field of social practice. In this sense, 'adult education brings together into a discrete social system all the individuals, institutions, and associations concerned with the education of adults and perceives them as working toward common goals of improving the methods and materials of adult learning, extending the opportunities for adults to learn, and advancing the general level of our culture' (Knowles, 1980: p25).

This latter element highlights the social movement dimension to the growth of adult education, referred to earlier, and that it is now considered a sector in its own right with specific objectives and methodologies. In the Irish context, this is sometimes captured in the term adult and community education. This understanding of adult provision is inverted in UNESCO's distinction between adult education and lifelong learning. Whereas UNESCO suggests that adult education can be defined as engaging 'in courses and other educational activities organized by a teacher or sponsoring agency, and taken by persons beyond compulsory school age', it proposes the following definition of lifelong learning: 'The term "lifelong education and learning" denotes an overall scheme aimed at restructuring the existing educational system and at developing the entire educational potential outside the education system; in such a scheme men and women are the agents of their own education' (UNESCO, 2009: p13).

Euorstat's definition of lifelong learning is that it 'encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence' (epp.eurostat.ec.europa. eu/statistics explained/index.php/Lifelong learning statistics). The references to adults who are agents of their own education (UNESCO) and to non-formal education (Eurostat) echo the type of social practice generally associated with adult and community education and which generally involve a different institutional context and pedagogy than that of more formal educational institutional settings.

It should be clear from the above that the concept of continuing education is by no means fixed, that it is interchangeable with other terms (adult education and lifelong learning) and that it overlaps with further education and training and even with training per se. In this review we propose to define continuing education as provision for adults that is: (a) not covered by the term higher education or further education and (b) not directly linked to progression from the second level system. This includes educational programmes targeted at employment outcomes (including provision for unemployed adults) and in this context can include content more usually delivered at second level. This definition also includes forms of provision which target social inclusion. This element may be more appropriately understood as adult and community education. Examples of this from Ireland include literacy and adult education programmes provided by the VECs (some of which may be part of the Leaving Certificate curriculum), and programmes delivered by community organisations.

Definitions of Vocational Training

The term training rarely appears on its own within the literature. Instead it is usually referred to as vocational training and invariably combined with vocational education abbreviated to VET (EI, 2009; UNSECO, 2001). It is acknowledged within the literature that vocational training is notoriously difficult to define (see for example NDA, 2004; EI, 2009, British Council, 2011). This arises in part from the fact that most, if not all, education has a training or vocational dimension. In addition as vocational training is provided at various levels of the educational and qualification system, it is hard to distinguish it from other sectors and in particular it may overlap with the categories of further and continuing / adult education.

This difficulty can be seen in the description of vocational education and training put forward by the UNESCO Convention on Technical and Vocational Education (1989). This defines the sector as: '... all forms and levels of the educational process involving, in addition to general knowledge, the study of technologies and related sciences, the acquisition of practical skills, know-how, attitudes and understanding relating to occupations in the various sectors of economic and social life' (unesco.org/en/ev.phpURL ID=13059&URL DO=DO TOPIC&URL SECTION=201.html).

More usually, however, vocational education and training are specifically linked to preparation for, or advancement in, employment and there is near consensus that its orientation is to the labour market. Thus, at the broadest level, vocational training has been described as a 'hub between general education and the labour market' (EI, 2009) and this focus is prevalent in most definitions as the examples below indicate:

- Vocational training is 'supplementary to initial training which is part of an ongoing process designed to ensure that a person's knowledge and skills are related to the requirements of his / her job and are continuously updated.' (CEDEFOP Glossarium: p65)
- Vocational and technical education is mainly designed to lead participants to
 acquire the practical skills, know-how and understanding necessary for employment
 in a particular occupation or trade (or class of occupations or trades). Successful
 completion normally leads to a labour-market relevant vocational qualification
 recognised by the competent authorities (for example the Ministry of Education,
 employers' associations) in the country in which it is obtained (glossary.uis.unesco.
 org/glossary/en/home).
- Vocational education and training, abbreviated as VET, sometimes simply called vocational training, is the training in skills and teaching of knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate (Eurostat).
- Vocational programmes prepare participants for direct entry, without further training, into specific occupations. Successful course completion leads to a labourmarket relevant vocational qualification. Some indicators divide vocational programmes into school-based and combined school / work-based programmes on the basis of the training level provided in school as opposed to in the workplace. (OECD, 2002; p377).

The OECD (2001) also defines training for employed, unemployed or at risk adults as follows:

- Training for unemployed adults is training supported for reasons of labour market policy other than the need to help the unemployed and those at risk.
- Training for unemployed adults and those at risk are programmes aimed mainly, though not always exclusively, at the unemployed and those at risk of losing their jobs, or other disadvantaged groups such as the poor (especially in the US).

The situation for vocational training in Ireland is summarised by a recent CEDEFOP on VET in Ireland. That report states: 'There is no legal definition for "initial vocational"

education and training" and "continuing vocational education and training" in Ireland as these terms are not normally used in the context of the Irish VET system. An important feature of the Irish VET system in general, is that there is not a sharp distinction between initial and further and continuing vocational education and training for the unemployed and new entrants into the workforce, whether they are young or older people. Rather, Government policy in general makes a distinction between programmes for young persons and school students, programmes for the unemployed (whether young or older) and programmes for persons in employment' (CEDEFOP, 2011, p15).

To develop discrete categories to support this literature review, we consider vocational training to be provision for adults (including unemployed adults) which is not formally linked to progression from the second level school system, (on which basis it is differentiated from further education) and which is directed towards the acquisition of skills directly linked to securing or advancing in specific types of employment or in specific sectors. Examples of vocational training provision in Ireland includes FAS programmes for employed and unemployed people, programmes delivered by industryspecific agencies such as Failte Ireland, Teagasc etc, and private sector training.

Definitions of Rehabilitation

The term rehabilitation is qualitatively different in many respects to the other terms looked at here. First, it is not usually considered part of the overall educational and training system and is most commonly embedded in social protection or employment legislation and policy, rather than education or training policy. Rehabilitation is also unique in its exclusive focus on people with disabilities or impairments and therefore is usually delivered in de facto segregated settings.

Rehabilitation per se has many meanings and applications including within the medical and social sphere. For example, the British Society of Rehabilitation Medicine (BSRM) defines rehabilitation as 'the process of active change by which a person who has become disabled acquires the knowledge and skills for optimal physical, psychological and social function'. The World Health Organisation defines it as: 'A progressive, dynamic, goal-oriented and often time-limited process, which enables an individual with an impairment to identify and reach his / her optimal mental, physical, cognitive and / or social functional level' (cited in Optimising the Role, 2006).

In this review, however, we focus on what is usually called vocational rehabilitation. Frequently aimed at people with acquired disabilities, this aims to help such people retain or regain the ability to participate in work. The policy context of vocational rehabilitation is recognised as complex. The International Labour Organisation (ILO) states: 'The issue of vocational rehabilitation and promotion of employment for people with disabilities is complex as it involves many facets, including the type and extent of disability, rehabilitation structure, vocational rehabilitation, labour laws and practices, societal and employer attitudes, civil rights laws, labour market trends and so forth. In other words, 'it is an issue that is located at the nexus of social convention and labour market activity' (ILO, 1998: p1). More recently, this link between vocational rehabilitation and social protection systems has been captured in the term 'disability management' (WHO, 2012).

Vocational rehabilitation is directly linked to employment outcomes and, frequently, a return to employment. This is emphasised in its various definitions. For example, the ILO's Vocational Rehabilitation and Employment (Disabled Persons) Convention (No 159, Article 12, 1983) notes that 'the purpose of vocational rehabilitation [is] to enable a disabled person to secure, retain and advance in suitable employment and thereby to further such person's integration or reintegration into society' (ILO, 1983). An indication of the areas covered by this definition is provided by Article 9 of the same convention, which refers to members' responsibility to ensure 'the training and availability of rehabilitation counsellors and other suitably qualified staff responsible for the vocational guidance, vocational training, placement and employment of disabled persons'. The ILO's report on Convention 159 and Recommendation 168 notes that these instruments also 'suggest the provision of other related services such as preparation for training, modular training, training in literacy and for day-to-day activities and other training directly or indirectly related to vocational rehabilitation and geared to the social integration or reintegration of people with disabilities' (ILO, 1998: p23).

This understanding is echoed in national level definitions. For example, vocational rehabilitation is defined by the UK Department of Work and Pensions (2004) as a 'process that enables an individual to overcome barriers faced when returning to, remaining at, or accessing work after an injury, illness, or impairment' (p183). Similarly, the Framework for Adult Rehabilitation in Scotland (2007) sees it as 'a process that enables people with functional, psychological, developmental, cognitive and emotional impairments or health conditions to overcome barriers to accessing, maintaining or returning to employment or other useful occupation' (p32). Within the academic literature, this understanding prevails:

- 'Vocational rehabilitation is a dynamic process consisting of a series of actions and
 activities that follow a logical, sequential progression of services related to the total
 needs of a person with a disability. The process begins with the initial case finding or
 referral, and ends with the successful placement of the individual in employment'
 (Chan et al, 1997)
- 'Vocational rehabilitation traditionally refers to the provision of some type of service to enhance the employability of an individual who has been limited by a disabling physical condition'. (Elliot & Leung, 2004)
- 'Vocational rehabilitation is a set of services offered to individuals with mental or
 physical disabilities. These services are designed to enable participants to attain
 skills, resources, attitudes, and expectations needed to compete in the interview
 process, get a job, and keep a job. Services offered may also help an individual
 retrain for employment after an injury or mental disorder has disrupted previous
 employment' (www.minddisorders.com).

This provision differs from vocational training (and the other categories looked at here) in that it is not solely about the transfer of skills (although it may include training for this purpose). But it is about addressing the full range of factors necessary for an individual to

retain or re-enter employment. As such, vocational rehabilitation is specifically focused on individuals and their particular needs and in most jurisdictions is delivered via a case management approach. For this review, it is considered to be individualised provision (frequently targeted at people with acquired disabilities) which may include training programmes as part of a series of individually tailored services, with the objective of enabling retention of or return to employment. No examples of this type of this provision are currently in place in Ireland.



