# Students with disabilities in Dutch VET An exploratory study 

Arjan van der Meijden and Annemiek Cox, Barbara Murray and Anna Kealy

January 2015

## Required Publisher Statement

© International Labor Organization. Reprinted with permission. All rights reserved.

# Students with disabilities in Dutch VET 

An exploratory study

Arjan van der Meijden and Annemiek Cox, Barbara Murray and Anna Kealy

January 2015

For questions regarding this text, reach out to:
Arjan Van der Meijden, Senior Researcher
Kohnstamm Instituut
Kohnstamm Instituut UvA bv
Gijsbert van Tienhovengebouw, Roetersstraat 31, 1018 WB Amsterdam
Tel +31(0)20-5251365 || mob +31(0)6 28940125 || www.kohnstamminstituut.n|
|| Twitter @kohnstamm_uva
GLOSSARY ..... IV
PREFACE ..... v
1 INTRODUCTION ..... 1
1.1 BAckground ..... 1
1.2 Young people with disabilities in the Netherlands ..... 2
1.2.1 Youth with intellectual and mental health disabilities ..... 2
1.3 Exploratory study of Inclusive Vocational Education and Training ..... 3
2 LITERATURE REVIEW: STUDENTS WITH DISABILITIES IN VET ..... 5
2.1 ApPROACH TAKEN ..... 5
2.2 VET in the Netherlands ..... 5
2.2.1 Law and the Dutch education system ..... 8
2.2.2 Definition of SEN in the Netherlands ..... 10
2.2.3 Finance ..... 10
2.2.4 Training options for students with disabilities ..... 13
2.2.5 How are teachers in Dutch VET prepared for working with disability? ..... 15
2.3 VET in Denmark ..... 17
2.3.1 Law and the Danish education system ..... 18
2.3.2 Definition of SEN in Denmark ..... 19
2.3.3 Concluding comment ..... 19
2.4 VET in Germany ..... 20
2.4.1 Law and the German education system ..... 21
2.4.2 Definition of SEN in Germany ..... 22
2.4.3 Concluding comment ..... 22
2.5 VETin Australia ..... 23
2.5.1 Law and the Australian education system ..... 23
2.5.2 Students with disabilities in Australian VET ..... 23
2.5.3 Definition of SEN in Australia ..... 24
2.5.4 Concluding comment ..... 24
3 SURVEY OF VET SCHOOLS IN THE NETHERLANDS ..... 25
3.1 Introduction ..... 25
3.1.1 Current issues in the Netherlands ..... 25
3.2 Researching VET schools - Methodology ..... 26
3.2.1 Selection of VET schools ..... 26
3.2.2 Interviews ..... 27
3.2.3 Data collection and response ..... 27
3.3 RESULTS ..... 29
3.3.1 Attitudes ..... 30
3.3.2 Perception of efficacy ..... 34
3.3.3 Professional collaboration and teamwork ..... 35
3.3.4 Managing disruptive behaviour ..... 35
3.3.5 Preparation for working with students with disabilities ..... 36
4 CONCLUSIONS ..... 37
4.1 SUMMARY ..... 37
Literature review ..... 37
Exploratory survey of mainstream VET instructors. ..... 39
4.2 Changes in 2014 ..... 40
4.3 FURTHER STEPS AND RECOMMENDATIONS ..... 40
SOURCES ..... 42
Other sources ..... 46
APPENDIX 1: SURVEY INSTRUMENTS USED ..... 47
Opinions Relative to Integration of Students with Disabilities (ORI) ..... 47
Teacher Efficacy for Inclusive Practices (TEIP) Scale ..... 48
Questions about preparation ..... 49
Questions about the interviewee ..... 49
List of Figures
Figure 1: Schematic overview of the Dutch educational system ..... 6
Figure 2 Example: LGF students in Deltion College ..... 12
Figure 3: Financial stimuli as of 2014 ..... 12
Figure 4: Students by disability type and VET level, (\%) ..... 14
Figure 5: Example - Teacher training institute ..... 16
Figure 6: Are all Students with disabilities in your school registered as such? ..... 29
FIGURE 7: PERCEIVED BENEFITS OF INTEGRATING STUDENTS WITH DISABILITIES INTO GENERAL GROUPS ..... 31
Figure 8: Perceived classroom management issues relating to the integration of STUDENTS WITH DISABILITIES ..... 32
FIGURE 9: PERCEIVED ABILITY TO TEACH STUDENTS WITH DISABILITIES ..... 33
Figure 10: PERCEIVED COMPETENCIES IN INSTRUCTING STUDENTS. ..... 34
FIGURE 11: PERCEIVED POSSIBLE COLLABORATION WITH PROFESSIONALS IN RELATION TO STUDENTS WITH DISABILITIES ..... 35
Figure 12: Perceived competencies in managing deviant behaviour in the group ..... 35
FIGURE 13: HOW ARE YOU TRAINED TO WORK WITH STUDENTS WITH DISABILITIES? (NUMBER OF RESPONDENTS) ..... 36
List of Tables
TABLE 1: YOUTH WITH PHYSICAL, HEARING AND VISUAL IMPAIRMENTS IN THE NETHERLANDS. ..... 2
TABLE 2: CLuSTERS OF DISABILITIES* ..... 7
Table 3: Number of students in Clusters 2, 3 or 4 in Dutch secondary Vet ..... 13
TABLE 4: RESPONDENTS, DISTRIBUTED BY LOCATION AND SIZE OF ROC. N=28 ..... 28
TABLE 5: ROLES OF RESPONDENTS. ..... 28
Table 6: Experience in VET and with Students with disabilities (in years). ..... 28

## Glossary

AOC

AWBZ

DUO
ecbo

IASG

LGF

NCVER

OECD

ORI

REC

ROC

SEN

TEIP

VET

VOA

ZAT

Agragrisch Opleidingen Centrum (Agricultural Educational/Training Centre) Algemene Wet Bijzondere Ziektekosten (Exceptional Medical Expenses Act) Dienst Uitvoering Onderwijs (Governmental Office of Education administers data on students)

Expertisecentrum Beroepsonderwijs (Expertise Centre for Vocational Education

Inter-Agency Support Group (for the UNCRPD) IBO Interdepartementaal Beleids Onderzoek (funds related to "Interdepartmental Policy Research") Leerling Gebonden Financiering (Student-bound Financing) National Centre for Vocational Education Research (Australia) Organisation for Economic Co-operation and Development Opinions Relative to Integration of Students with Disabilities Regionaal Expertise Centrum (Regional Centre of Expertise) Regionaal Opleidingen Centrum (Regional Educational/Training Centre)SCP Sociaal en Cultureel Planbureau (Netherlands Institute for Social Research) Special Educational Needs Teacher Efficacy for Inclusive Practices Vocational Education and Training Voorbereidende en Ondersteunende Activiteiten (funds related to "Preparatory and Support Activities") Zorg en Advies Team (Care and Advice Team)

## Preface

The inclusion of persons with disabilities in general programmes of vocational training has been called for by the ILO in international labour standards over many years, including standards relating to Human Resources Development and disability-related standards. This call is taken up strongly in the UN Convention on the Rights of Persons with Disabilities which calls on States Parties to take appropriate steps to enable persons with disabilities to have effective access to general tertiary education, vocational and life-long learning without discrimination and on an equal basis with others, and to ensure that reasonable accommodation is provided to that effect.

While many countries have expressed commitment to this vision of inclusive vocational training, progress has been limited, even in countries which have adopted policies to promote, and there has been limited analysis of the factors hindering the effective implementation of such policies. It was thus appropriate for the ILO to undertake this exploratory study, to seek to pinpoint elements of policy and practice that might need to be addressed, if these policies on inclusion are to make a difference to persons with disabilities seeking to develop their skills with a view to obtaining decent jobs. The issues identified in this study will hopefully contribute to the wider policy debate, particularly on the matter of instructor preparation for disability inclusion and on the impact of funding arrangements. It will also hopefully stimulate further research to establish whether the patterns identified here are general patterns to be found and tackled elsewhere.

## 1 Introduction

### 1.1 Background

Young people with disabilities have notable difficulties in accessing employment. On the other hand, it is widely recognized that vocational education improves the chances of finding employment, including for those with disabilities but that this group seem to face greater difficulties in acquiring skills relevant to employment than young people without disabilities. As stated by the ILO (2008), "Skills development is a central factor in enabling people with disabilities to take part in the labour force. Those who have had the opportunity to acquire marketable skills have demonstrated their potential to earn a living and contribute in the world of work". This reflects the emphasis placed in ILO's Recommendation No. 195 on Human Resources
Development on the need for States to promote access of people with disabilities to education, training and life-long learning (ILO 2004). The G20 Training Strategy also includes as one of its 9 building blocks 'Broad Access to Training' with a strong focus on people with disabilities (ILO, 2010).

In Europe, 20 per cent of people with disabilities and 44 per cent of people with severe disabilities (who are nonetheless able to work) are unemployed. Indeed, "the limited information available on this group points to very low employment rates and increasing numbers taking up disability and other benefits, either directly from school or early in their working lives" ${ }^{11}$ (Eurofound, 2012). Data from Australian research show that people with a disability are far less likely to be employed after their training than people without a disability (NCVER, 2012). In 2006 the Netherlands had an employment rate of approximately 44 per cent for people with disabilities, and an unemployment rate of approximately 8 per cent (for people without disabilities these percentages are approximately 81 per cent and 4 per cent) (OECD, 2009). A study on students with disabilities in German secondary vocational education and training (VET) finds that this group experiences great difficulties when moving from study to work. Furthermore, the research shows that 80 per cent do not make the transition between VET and higher education (Niehaus and Kaul, 2012). Yet further research shows that completing a VET qualification significantly improves the likelihood of subsequent employment for people with a disability (NCVER, 2012).

Where people with disabilities attend mainstream training, support services are sometimes required to ensure that they benefit effectively. Policy provisions are increasingly made for such services in many countries, sometimes backed by legislation (ILO, 2003). Key issues to be addressed are: whether all people with disabilities can be reached by and benefit from community-based vocational skills training; whether community-based vocational training institutions are prepared to provide services to people with disabilities; and whether the teaching and other staff have the knowledge, skills and attitudes to provide effective training services to people with disabilities.

Central to the discussion of how students with disabilities can be effectively enabled to attend mainstream vocational training programmes is the question of how disability is defined. The World Health Organisation's International Classification of

[^0]Functioning understands 'disability' as an umbrella term, covering impairments, activity limitations, and participation restrictions. The ICF defines an impairment as a problem in bodily function or structure; an activity limitation as a difficulty encountered by an individual in executing a task or action; and a participation restriction as a problem experienced by an individual in involvement in life situations. ${ }^{2}$ The United Nations Convention on the Rights of Persons with Disabilities (CRPD) recognizes that "disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others". Both the ICF and the CRPD represent a significant shift from the more traditional approach in which disability is seen as linked to an individual's impairment. For policymakers and service providers, the challenge is to foster an enabling environment that will facilitate the effective inclusion of persons with disabilities alongside others.

### 1.2 Young people with disabilities in the Netherlands

All children receive education on different levels, from primary to tertiary education. A number of the youth with disabilities follow education within Dutch Vocational Education and Training (VET) institutions. The study examines the situation in the Netherlands and explores the position of students with disabilities within VET institutions (for an overview of the Dutch VET system, see Section 2.2). The research will shed light on the awareness, attitudes and professionalism of staff in VET institutions, and on questions regarding legislation and its effect on VET institutional practices. It is estimated that there are around 300,000 children aged $6-19$ with mild to severe disabilities in the Netherlands, around 10 per cent ${ }^{3}$ of all children in this age group (de Klerk et al, 2012).

In a comparative European-wide study, the authors concluded that there is no clear legal definition of the concept of special educational needs (SEN) in European countries (Ebershold et al, 2011).

Furthermore, there is significant variation in educational performance between students with different types of disability, and therefore it is not helpful to treat 'students with a disability' as one group (Miller and Nguyen 2008).

Table 1: Youth with physical, hearing and visual impairments in the Netherlands

| Number of youth (aged 6-19) | Mild | Severe | Total |
| :--- | :---: | :---: | :---: |
| Visual impairment | 50000 | 80000 | 130000 |
| Hearing impairment | 10000 | 35000 | 45000 |
| Physical (motor) impairment | 65000 | 65000 | 130000 |

Source: (de Klerk et al, 2012)

### 1.2.1 Youth with intellectual and mental health disabilities

Youth with intellectual disabilities and those with mental health difficulties are not included in Table 1, since there is less certainty on the prevalence of these types of

[^1]disability. Administrative data is available on this group of young people, though these data may underestimate the prevalence of intellectual disability and mental health issues. People who need care can apply for funds via the Exceptional Medical Expenses Act (AWBZ); requests for assistance can serve as an indication of the numbers of people in three groups: persons with severe intellectual disability (IQ <50); those with light intellectual disability ( $50<1 \mathrm{Q}<70$ ); and those with below average intelligence quotients ( $70<1 \mathrm{Q}<85$ ).

In 2009, applications for financial assistance were received from 62,800 people with severe intellectual disability, 68,300 people who were lightly intellectual disabled and 32,500 who were 'below average'. Of these 163,600 people, some 69,000 were under 22 years of age. However, it is estimated that the actual prevalence of people with intellectual disabilities is much higher, and that relatively few are registered. The Netherlands Institute for Social Research (SCP) ${ }^{4}$ estimates that the number of the severely intellectually disabled in the Netherlands is 63,000, of lightly intellectually disabled around 110,000 and the 'below average' group, around 150,000 - a total of 323,000, almost double that identified using the numbers derived from applications for financial assistance (Woittiez et al, 2012).

### 1.3 Exploratory study of Inclusive Vocational Education and Training

Ample international literature is available on inclusive education in regular educational settings, where the choice between 'inclusive education' and 'special education' can be made. While this literature focuses on many aspects of inclusion, such as the group dynamics and strategies in classrooms, including structures, teacher perspectives and support (Jahnukainen, 2003; Downing, 1996; Salend, 2001), little is available on students with disabilities in VET institutions. The educational settings referenced in most literature on inclusive education (i.e. classrooms, teacher-student relationship, etc.) arguably do not portray the vocational educational system. Little is known about students with disabilities in Dutch VET institutions, the policies and laws which affect them most, and how VET institutions and their teachers adapt to educating these groups, with their own specific needs.

In 2011 the International Labour Organization requested ecbo, the 'expertise centre for vocational education', to explore how the policy on inclusive education was working in practice in the Netherlands from the perspectives of the suppliers of vocational and technical education (as opposed to the perspectives of students with disabilities). ${ }^{5}$

To gain an idea of the perspectives of VET institutions on 'catering for' students with disabilities, ecbo conducted an overview of policies and statistics relating to students with disabilities in VET institutions. The central question was: "What are the perspectives of suppliers of vocational education on the inclusion of students with disabilities, and what problems do they encounter?" A short memorandum resulted,

[^2]which concluded that Dutch VET institutions offer programmes and courses to all students who wish to take part, whether with or without disabilities.

However, the actual ability to do this successfully depends largely on the professionalism and attitudes of the school team and structure. According to the experts interviewed in 2011, school management tends to focus on minimizing risks (for example, seeking a high diploma rate and a low dropout rate) and so is reluctant to invest time and effort in a relatively small group of students perceived as being higher-risk in terms of school success. Consequently, little effort is made to provide sufficient training for teachers (and others, such as coaches during apprenticeship) who deal with students with disabilities. They are currently reliant on the internet and other sources for information.

The exploratory initial overview conducted by ecbo offers a glimpse into the current situation in Dutch VET institutions in regard to students with disabilities; more research was (and is) clearly required. The memorandum ended with a number of research questions, broadly divisible into two themes:

- "What is known about policies, implementations, and statistics regarding students with disabilities in vocational education?" and;
- "What are the perspectives of suppliers of vocational education on the inclusion of students with disabilities, and what problems do they encounter?"

In late 2012, the ILO commissioned ecbo to explore these questions further. This was a twofold process; to investigate the first theme this study undertook a review of relevant literature (see Chapter 2), and a survey of mainstream service providers, especially the instructors/teachers to address the latter (see Chapter 3).

In this report, an overview is presented of the legal and policy framework for inclusive vocational training in the Netherlands: the main steps taken to give effect to these policies and laws are summarized, and ways in which the policies links to other relevant policies and laws are identified; eventual provisions are examined for inclusion in teacher-training curricula; and information on the awareness, attitudes and professionalism of VET staff is examined. For comparative purposes, an outline is given of the situation in a number of selected countries.

## 2 Literature review: students with disabilities in VET

### 2.1 Approach taken

This study focuses on the situation in the Netherlands. However, for the purposes of comparison, literature on several other countries was also taken into account. Two Northern European countries (Germany and Denmark) and Australia were chosen, as they represent countries inside and outside of Europe where VET is known to be highly developed and organised, making them somewhat comparable with the Dutch context.

The various sources consulted for this project are summarized below and detailed in the Sources section: Personal consultation/interviews:

- Teacher training institute
- Experts
- Platform for disabled persons in secondary vocational training ${ }^{6}$ Bibliographical databases:
- ecbo database
- VET-BIB (Cedefop) database and library experts ${ }^{7}$
- International comparative research:
- Denmark and Germany: experts from ReferNet ${ }^{8}$
- Australia: desk research

Literature, policy and practice, examples and documents:

- Desk research


### 2.2 VET in the Netherlands

Secondary vocational educational training in the Netherlands is provided by relatively large institutions: there are 66 publicly funded institutions (43 regional educational centres - ROCs; 11 agricultural educational centres - AOCs; and 12 trade training institutions - vakinstellingen). Together they offer vocational education to some 539,500 students.

Secondary VET provides a broad and diverse range of vocational programmes for a variety of professions; from nurse to mechanic, from cook to security officer. Secondary VET is offered in two equivalent tracks, a dual track (originally the apprenticeship system), and a school-based track. The difference between the two is the number of hours dedicated to learning at school and the number of hours spent learning in the workplace. Dual track emphasizes learning in practice in a specific company or in a workshop organised by a number of firms. In the construction industry, for instance, students on dual tracks are under the collective labour agreement and have a contract with a firm or, in most cases, with a local training firm for the construction industry set up by local building firms.

[^3]Secondary VET is offered at four levels, Level 1 being the lowest and Level 4 the highest. In general terms, a Level 1 qualification allows progression to a course at Level 2, and so on. A Level 4 qualification entitles someone to proceed to Higher Education (HE).

Figure 1: Schematic overview of the Dutch educational system


Students usually enter secondary VET around the age of 16, after they have completed pre-vocational education. ${ }^{9}$ In general terms, the Dutch system is organised in three layers, with primary education at the bottom. The second layer consists of three streams of secondary education, i.e., there are three school types. The first, junior general and prevocational education (VMBO), prepares students for secondary vocational education, while the two other streams prepare for HE: senior general secondary education (HAVO), for higher professional education ranked at BA level; and pre-university education (VWO), for university education ranked at MD level.

Since secondary VET (and higher professional education) aim to prepare for working life, young people should not leave the system without having passed this phase. This is true for 85 per cent of the students in general education (Heijke, 2008).

Dutch secondary VET has a threefold mission: to prepare students for a profession, for civil life and for further education. Secondary VET is primarily offered at regional training centres $\left(\mathrm{ROCs}^{10}\right)$, typically large institutions with many thousands of students

[^4](for instance, ROC van Midden Nederland offers courses to over 20,000 students). ROCs also offer adult education.

In recent decades, the need to strengthen the link between VET and the labour market has been the source of many changes and innovations within secondary vocational education. A milestone was reached with the introduction of the Vocational Education Act (WEB) in 1996, which was the prelude to pioneering a new approach: competence-based education (CBE).

## Competence-based education (CBE)

In the Netherlands, a competence is defined as a work-based combination of knowledge, skills and behaviour. For example, competence-based education assumes that a trade professional who is starting out has acquired certain competencies, including the skills of planning and collaboration. Thus, students learn how to communicate better and how to work in cooperation with one another. The competencies a student must acquire in order to graduate are defined in the qualification standards file, compiled by national, industry-specific 'knowledge centres' in close consultation with the trade industry. Each training programme and all levels of training have such a qualification standards file. Schools use these qualification standards for the development of competence-based education, and a large number of secondary vocational students are now in competence-based programmes. Since the 2010-2011 school year, nearly all ROCs offer this type of education to the new recruits to secondary VET.

Dutch VET also has the responsibility of ensuring that the courses offered are relevant to the labour market and give students a fair chance of employment. Some 68 per cent of all young people choose a school career in VET (OECD, 2008). The total number of students in VET at any given time is over 500,000. Students with disabilities are included in this number, since there is no 'special education' designation in VET.

## Clusters

In the Netherlands, students with disabilities can, from an early age, be classified, as being in one or more of four clusters that are related to school types and types of funding. This is done by specialized 'regional centres of expertise' (RECs).

Table 2: Clusters of disabilities *

| Cluster <br> $1:$ | Children with visual disabilities; children with multiple disabilities and a <br> visual disability. |
| :--- | :--- |
| Cluster <br> $2:$ | Children with hearing disabilities; children with severe communicative <br> disabilities; children with multiple disabilities (and also a hearing and/or <br> communicative disability). |
| Cluster <br> $3:$ | Children with physical disabilities; children with severe learning difficulties <br> (IQ below 70); children with chronic diseases with a physical disability; <br> children with multiple disabilities (and also physical disabilities, learning <br> difficulties or with a chronic disease with a physical disability). |
| Cluster <br> $4:$ | Severely maladjusted children; children with behavioural and/or <br> psychiatric disorders such as Attention Deficit Disorder, antisocial <br> behavioural disorder, autism, Gilles de la Tourette, attachment disorders. |

*http://www.rijksoverheid.nl/onderwerpen/passend-onderwijs/vraag-en-antwoord/wat-is-speciaalonderwijs.html

In primary and most secondary education students can participate in 'special education' adapted to the special needs of specific clusters. There are 23 schools for Cluster 1, 41 schools for Cluster 2, 179 schools for Cluster 3 and 200 schools for Cluster 4. However, there is no 'special education' equivalent in secondary VET, higher education and universities. In the latter three education streams, students can only participate in regular education or not participate at all.

With an 'indication', students with disabilities can be admitted to special education (not vocational and higher), or else can receive regular education, often with specialized assistance and/or extra funding, which is the case in VET (see Section 2.2.3). When students with disabilities (in all education streams) follow regular education, this is often with specialised assistance and/or extra financing.

### 2.2.1 Law and the Dutch education system

The Dutch education system is characterized by the constitutional freedom of education. This is the freedom to found schools (other than VET), to receive funding equal to publicly run schools, and the freedom to determine how teaching is organised and what ideology will be followed. Article 1 of the Dutch Constitution (prohibition of discrimination) lies at the foundation of Dutch education. ${ }^{11}$ The prohibition of discrimination on the grounds of disability is elaborated upon in the law "equal treatment on grounds of disability or chronic disease". This law states that discrimination is, amongst others, prohibited for: access to education; the provision of education; conducting tests; completing education; access to, and provision of, career and vocational guidance (only at VET).

Dutch VET has been made more accessible for people with a disability or chronic illness by the Equal Treatment Act (adopted in 2003 and described above), which covers employment and vocational education. Transporting disabled students to and from school is the financial responsibility of local authorities. According to experts, parents, students and schools are not always aware of this and sometimes provide their own transport.

In August 2006 the Act on Professions in Education ("Wet op de Beroepen in het onderwijs", the "BIO Act") took effect. The "Standards of Competence (in Teaching Staff) Decree" was introduced with it and describes the required teaching standards for the various educational sectors (see Section 2.2.5).

## Refusal of admission

Direct and indirect discrimination against participants on the basis of disability or chronic illness is prohibited by law. Direct discrimination means that a pupil who could follow education is rejected simply because of his or her disability or condition. But it may also be that a pupil is denied for reasons that are indirectly linked to his or her disability. Think of a school's prohibition against dogs in the building, for instance; such a measure renders the school inaccessible to people with a guide dog. Furthermore, many MBO institutions weigh up whether a student with a disability or chronic illness will be able to successfully complete all parts of the training course, or

[^5]indeed, will be able to work in the profession for which the training is intended (Tudjman et al, 2009).

In 2013 the 'Start Foundation'12 presented a publication ${ }^{13}$ on refused admissions of young people with autism to Dutch VET schools. The foundation received 176 reports of refused admission, from 146 individual young people. Some 32 per cent of these young people were reportedly refused at first request for admission, while 42 per cent were refused at intake. In 61 per cent of cases, the refusal was directly related to the disability; in 29 per cent of cases the link was simply suspected. The researchers had the strong impression that the formal reasons for refusal were different to the real reasons; an indication of this was found in the fact that two-thirds of the refused admissions were not put on paper, but done verbally (Start Foundation, 2013). The reasons given - verbally - varied from "the school does not expect to find a workplace for the practical training (which is an integral part of Dutch VET)" to "missing skills".

Whether or not these figures are accurate or representative for the whole Dutch VET system (students reported their experiences on a web-based questionnaire through the Start Foundation website )they do show that many students feel discriminated against because of their disability. But why would they be discriminated against? What are the possible factors that may inhibit access for students with disabilities to Dutch VET? Is it legally permissible for a school to refuse admission, if a student's particular disability is assumed to imply that their likelihood of success is minimal?

## 'Effective adjustments'

Dutch secondary VET schools are by definition 'inclusive'. The prohibition of discrimination does not mean, however, that a student with a disability is always entitled to admission to the school or education of his or her choice. The school must determine whether the student is suited for educational participation. Each case is examined as to whether the student's specific impairment or disability stands in the way of education, or whether an effective adaptation can be made to help them. The law states, in article 2: "The prohibition of discrimination also implies that the person to whom this prohibition is addressed is obliged to provide effective adjustments according to need, unless to him this is a disproportionate burden"14 (Ministry of Justice, 2003). The right to 'effective adjustments' is stated; however, it is not further defined what these are.

It may be necessary for disabled and chronically ill students to have the school environment adapted to enable their participation in education. This could be a physical adjustment, such as a special lift and the removal of barriers, etc. Alternatively, it could be an immaterial adjustment, such as schedule rearrangements or additional support during lessons. When appropriate and necessary adjustments are refused, without compelling reasons, then there is discrimination. It is not the case that all educational institutions should take into account, in advance, any adjustments for different kinds of disabilities. Rather, initiative is expected on the part of the

[^6]disabled or chronically ill student; i.e., he or she must indicate that an adjustment is necessary.

## 'Disproportionate burdens'

Article 2 can also be interpreted to mean that if the requested adjustment leads to a 'disproportionate burden', the supplier of education is entitled to refuse the student. The law does not define this 'burden'. ${ }^{15}$ The Netherlands Institute for Human Rights interprets this as 'costs or technical unfeasibility', without further definition (2013). The same interpretation is used by the VET Council (www.mboraad.nl).

There are thus limits to the adjustments an institution is obligated to make. Several factors are considered in determining a disproportionate burden, (Tudjman et al, 2009):

- the size of the organization or institution;
- necessary investments and the cost of making the adjustment;
- the operational and technical feasibility of the adjustment;
- the financial capacity of the enterprise or institution;
- available financial allowances (if these are available, the adjustment is - by definition - proportionate);
- the interests of other participants/students must be taken into account;
- the presence and availability of comparable educational interests in the region should be taken into account.


### 2.2.2 Definition of SEN in the Netherlands

The law on the Expertise Centres (WEC 2003) states that pupils are eligible for special education if they meet certain criteria. These are largely based on existing practice.

Criteria for the visually impaired are a visual acuity: <0.3 or a visual field: < 30 and limited participation in education as a result of the visual impairment.

For hearing impaired pupils a hearing loss $>80 \mathrm{~dB}$ (or for hard of hearing pupils 35-80 dB ) and limited participation in education are required.

The decision to provide extra funding for mentally disabled pupils will be based largely on IQ < 60, for physically impaired and chronically ill pupils, medical data showing diagnosed disabilities/illness are needed. The criteria for behaviourally disturbed pupils require a diagnosis in terms of categories of the DSM-IV, problems at school, at home and in the community and a limited participation in education as a result of behavioural problems.

### 2.2.3 Finance

Students in VET who need extra care have recourse to three types of additional financing.

- Schools receive funds for students at Level 1 who need extra care, called VOA funds. The government reserves a total of 140 million euro per year for all schools).

[^7]- Schools receive funds to develop a systematic structure for extra care, called IBO funds. The government reserves a total of 75 million euro per year for all schools.
- Individual students who are 'indicated' in one of the four clusters of disability (see Table 2) bring a student-bound budget with them to school, known as 'LGF' (leerling gebonden financiering - student-bound financing). The government reserves a total of 30 million euro per year for all schools.

In 2006, VET effectively opened up for students with disabilities by introducing student-bound financing (LGF) to VET. These funds can be used for special study materials, for instance, or for extra guidance and advice (Rijksoverheid, 2013). This sum of money is individually earmarked for a student and can be used by the school and care providers to provide, for example, extra assistance and/or adapted school materials to enable the student to follow regular education.

If students with an LGF need extra care while at school, additional governmental funds or funding for households containing children with disabilities ${ }^{16}$ are available. However, according to the Dutch Council of the Chronically Ill and the Disabled, the lack of clarity on regulations regarding these funds makes it nearly impossible to use them properly. ${ }^{17}$

## Student-bound financing (LGF) and clusters

LGF is aimed at children with a handicap or disability who without extra provision would not be able to avail of regular education, and to stimulate inclusive education. Parents can request LGF at a 'commission for indication'. This is an independent commission which 'indicates' whether a child needs extra provision. The commission consists of professionals such as a medical doctor, a psychologist, an educational expert and a social worker. Students with a visual impairment are supported in a different manner; schools can request additional funds, as described in the Education and Vocational Education Act (Ministry of Education, Culture and Science, 2009).

The LGF financial system may have encouraged the 'indication' of as many pupils as possible as having special educational needs (SEN), even when this was not in the interest of the pupil. Between 2003 and 2009 the number of students with a financial 'backpack' (LGF) rose from 11,000 to 39,000. An explanation given by the ministry is that the system of 'indications' is an all-or-nothing situation. Students either receive an LGF (a relatively high sum), or nothing at all. There is no space in between for customized financing. Furthermore, it leads to unnecessary bureaucracy (Ministry of Education, Culture and Science, 2011).

The Dutch government has therefore chosen a different system that is based on inclusive education (passend onderwijs), characterized by decentralisation to schools in combination with fewer regulations (Ministry of Education, Culture and Science, 2011). This system will be introduced in August 2014 and will lead to a change in the roles and responsibilities of educational institutions, which will each receive their funding as a lump sum. Some schools are adapting their practice to the future financial situation: they already work on a collective basis, using individual financing. The following example illustrates this.

[^8]Figure 2 Example: LGF students in Deltion College

Deltion College ${ }^{18}$ is a Regional Educational Centre (ROC) that offers secondary vocational education to 13,000 students. Deltion has 1,100 staff. In 2011 Deltion commissioned a research position for the LGF students within their college. Deltion chose to distribute the LGF money directly to the training teams.

Within Deltion there are around 280 LGF students. They mostly study ICT courses. The LGF students are on average somewhat younger than 'regular' students, they generally choose shorter courses and generally study at a lower level. Three-quarters are male, and the researchers relate this to the fact that most LGF students fall in Cluster 4 and are dealing with autism, which is prevalent amongst males. There are eight training teams (teachers and mentors) that work with these groups. Training teams with a higher proportion of LGF students show better results (lower dropout rates) than teams in which LGF students are proportionally fewer. Even though causal conclusions cannot be drawn based on the available data, the better results were found mainly in the ICT courses. The researchers suggest that these courses were better 'equipped' for working with LGF students (in the report, the term 'Cluster 4 friendly' is used). Teams mention that they have many more students with SEN than just the LGF students. Most teams work without any specific policy, other than providing one hour of extra mentoring per week per LGF student. They see great differences in teachers who are specially trained and motivated to work with students with SEN, in comparison to teachers who see working with students with SEN simply as 'part of the job'. Teams like more structure in policy, in intake and in monitoring. They don't seem to be aware of internal and external agreements. Teams in Deltion have no problem finding places for apprentices in companies. Finally, teams find that parents have a limited and even 'controversial' role in their children's studies (they expect too much). (Den Hartog et al, 2011).

Figure 3: Financial stimuli as of 2014

Up until 2014, VET schools were financed for the extra care needed by students with disabilities on the basis of the 'LGF', an individual budget per student (commonly called a 'backpack'), which could be used by the school and supporting organizations. As of 2014, these LGF funds will not be individually based, but given to VET schools as a lump sum. Furthermore, as of 2014 VET schools in the Netherlands will be financed out of one national budget, to be distributed amongst all VET institutions. This will be done on the basis of three main criteria: the number of students, the duration of the study time (cascade model) and the number of diplomas.

The cascade model is as follows: for the first year of all students ${ }^{19}$ study, the school receives an annual student budget multiplied by a factor of 1.2, to invest in the start; for the second to fourth years by a factor of 1 ; for the fifth and sixth years by a factor of 0.5 ; and for the seventh year onwards by a factor of zero. In other words, if the student is in his or her fifth year (this is also the case for courses with a nominal duration of four years), the school only receives half of the yearly budget. After six years, the school receives nothing for the training, and only a budget for the diploma - if obtained. Hence, students who may foreseeably take more time to complete their studies than the nominal duration risk representing a financial loss for that educational institution.

[^9]Such financial stimuli may lead schools to preferentially admit students who: a) have a (high) chance of finishing their training within four years, and; b) who have a (high) chance of obtaining a diploma. The perception of schools may be that the chances of students with disabilities are not as high in this respect as those of non-disabled students.

### 2.2.4 Training options for students with disabilities

Although the situation under examination is that of 'students with disabilities in Dutch VET', it is widely recognized that the group 'students with disabilities' is a very heterogeneous one. When students with disabilities cannot be served by regular institutions - for example, because of the severity of their impairment - vocational courses at the REA college remain an option (www.reacollege.nl). This college offers courses for students with severe disabilities. The students are mostly recognized by UWV (an autonomous administrative authority, commissioned by the Ministry of Social Affairs and Employment to implement employee regulations) as being 'work disabled' and generally receive a disability benefit.

In these three education streams (VET, higher education and universities) students can only participate in regular education or not participate at all. When students with disabilities (in all education streams) follow regular education, this is often with specialized assistance and/or extra financing. 2 per cent of Dutch VET students are now students with disabilities (Smits, 2010).

The fact that secondary VET institutions are inclusive requires an adaption for the students and for the educators. For financial purposes, the cluster to which a student with disabilities is assigned is registered by DUO, a governmental organisation that registers all students in Dutch government-funded education.

Table 3: Number of students in Clusters 2, 3 or 4 in Dutch secondary VET

| Clust er | Track | $\begin{aligned} & 20 \\ & 06 \end{aligned}$ | $\begin{aligned} & 20 \\ & 07 \end{aligned}$ | $\begin{aligned} & 20 \\ & 08 \end{aligned}$ | $\begin{aligned} & 20 \\ & 09 \end{aligned}$ | $\begin{aligned} & 20 \\ & 10 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Dual | 132 | 258 | 155 | 171 | 151 |
| 3 | Dual | 38 | 98 | 83 | 91 | 83 |
| 4 | Dual | 337 | 804 | 646 | 768 | 811 |
| 2 | Schoolbased | 657 | 952 | 518 | 658 | 676 |
| 3 | Schoolbased | 786 | $\begin{aligned} & 1 \\ & 225 \end{aligned}$ | 788 | 994 | 929 |
| 4 | Schoolbased | $\begin{aligned} & 2 \\ & 246 \end{aligned}$ | $\begin{aligned} & 4 \\ & 164 \end{aligned}$ | $\begin{aligned} & 2 \\ & 905 \end{aligned}$ | $\begin{aligned} & 4 \\ & 176 \end{aligned}$ | $\begin{aligned} & 4 \\ & 704 \end{aligned}$ |

Cluster 1 students in VET are registered differently by DUO. Numbers are low; there are about 130 Cluster 1 students aged 16 and over in Dutch secondary education, including those in VET (Breetveldt et al, 2010). There are no available data on how many Cluster 1 students are studying in VET institutions, how this developed over the years, or in which track (school-based or dual) these students are studying.

We find that students classified in Cluster 2, 3 or 4 mostly study in the school-based track. Furthermore, the highest numbers are found in Cluster 4 (behavioural/developmental/psychiatric disabilities).

Based on data from a two-yearly national monitor researching the satisfaction of students in Dutch secondary VET (the 'JOB monitor'), ${ }^{20}$ it is estimated that approximately 9,000 children with a visual impairment study in a VET course, approximately 6,500 with a hearing impairment and around 3,000 students with a physical impairment. The monitor did not ask questions regarding the type of physical impairment.

Note that these numbers are based on self-evaluation from students, and are not related to the system of clusters. Numbers derived from the diagnosis of disabilities relating to funding (clusters) for extra support are quite different, as seen in Table 3.

The JOB monitor shows the percentages ${ }^{21}$ of self-assessment of students regarding their types of physical disabilities.

Figure 4: Students by disability type and VET level, (\%)


Source: JOB monitor. Responses were: Level $1(2,918)$; Level $2(31,645)$; Level $3(38,603)$; Level $4(72,250)$. The figure presents the percentages of the response per level.

Even though the students do not report on their 'indicated cluster', we can translate the 'visual impairment' to Cluster 1, 'auditive impairment' to Cluster 2 and 'physical impairment' to Cluster 3. Around three-quarters of the students reported that they had their impairment assessed by an official institution or doctor. Students reporting a disability or impairment are distributed across all educational levels. Stakeholders in VET point to the fact that most disabilities are non-physical; this group (Cluster 4) outweighs the number as portrayed by the JOB monitor, and form the greatest challenge for VET institutions.

It can be concluded that, even though the distinction between different groups of students with disabilities is somewhat unclear, the number of youth with physical

[^10]disabilities in the Netherlands lies at around 300,000 children aged 6-19. However, in vocational institutes only around 2,000 students are indicated in one of the 'physical' clusters (1, 2 or 3 ). The majority of students with disabilities in Dutch VET are found in Cluster 4 - around 5,500. In addition, there are many other students who report dealing with a physical impairment or handicap, but who are not all 'indicated' in a cluster. There are no data on the nature or severity of these students' self-reported disability.

### 2.2.5 How are teachers in Dutch VET prepared for working with disability?

In secondary vocational training centres in the Netherlands, self-regulation of learning strategies is an essential practice in pedagogy. Teachers support behaviour towards self-regulation using various instruction formats such as independent group work, project-oriented learning and project-based learning. These methods focus on the necessity of pedagogical flexibility and a learner-centred approach, providing the opportunity for learners to recognize their autonomy and thereby acknowledge the value of their tasks (European Agency for Development in Special Needs Education, 2012). Teachers do not always feel prepared and competent to fulfil the different roles that are part of this practice (van der Meijden et al., 2009).

The "Standards of Competence (Teaching Staff) Decree" was adopted in 2006 and details standards for different educational sectors, including vocational education. Six main competencies ${ }^{22}$ for teachers are described in detail, and lists of indicators are given (Ministry of Agriculture, Nature and Food Quality (LNV) and Ministry of Ministry of Education, Culture and Science (OCW), 2005). None of these indicators are directly connected to students with disabilities, inclusive education, diversity, etc. Nevertheless, the competencies teachers need to have, according to the "BIO Act", can be desctribed as adaptive, providing every individual student with an environment in which he or she can safely develop ${ }^{23}$.

The national JOB monitor (2012) surveyed students who reported having a disability on how their school acts. Students from VET Level 1 mostly answer positively to the question of whether "the school takes my handicap into account". Students in VET at higher levels are less satisfied. This is not surprising, since Level 1 students are often regarded as needing more care, and therefore receive more attention. Research shows that teachers at Levels 1 and 2 are more aware of and equipped for dealing with students with special needs (Groeneberg, 2012; Glaudé \& van Eck, 2011). However, there is no indication that teacher training curricula (in general) give specific attention to working with students with disabilities.

[^11]Figure 5: Example - Teacher training institute

The Seminarium for Orthopedagogy (www.hu.nl/seminarium) at the Applied University of Utrecht is one of three institutes which offer an MA training programme for teachers in Special Educational Needs (SEN). A spokesman from the university mentioned their attempt to ask twenty 'regular' teacher training institutes whether there was special attention given to students with disabilities in their curricula. They found nothing and abandoned the research.
To date, around 2,200 students, often teachers from primary and secondary education, followed a course at the Seminarium. The spokesman estimated that around five students were VET professionals, the others from other types of education.

How teachers are prepared for work within VET varies. Teachers can take numerous routes to qualification, the main three being:

- a Grade 1 MA-level diploma (teachers for higher secondary education);
- a Grade 2 BA-level diploma (teachers for lower secondary education);
- a 'pedagogical didactical license', often acquired by individuals with professional experience in the specific vocation.

Some teachers are not (officially) qualified at all; a number of teachers come from business to provide direct knowledge of the trade. These teachers can start without having any formal training as a teacher, even though they are meant to follow a course to obtain a 'didactical license' as described above (van der Meijden et al, 2012).

Besides the daily lessons, which are run by the teachers, other professionals do much of the 'specialist' work with students with disabilities; intake, support, and so forth. This is not centrally regulated, but depends on the policies set out by the VET institutions. Most VET institutions are regionally oriented and organized, and known as ROCs (Regional Education Centres). Regarding students with disabilities, each region in the Netherlands also has a 'Regional Expertise Centre' (REC). These centres are divided according to the four clusters, and they bring together knowledge and expertise from special schools in the region. RECs provide special education, but also offer ambulant assistance to 'regular' schools (including VET institutions) where students with disabilities are educated. In some cases, RECs also offer forms of diagnosis and observation.

However, all VET institutions in the Netherlands have a 'system of care' in place. A 'ZAT' (Care and Advice Team) is part of the 'care structure' of each school; this is a multidisciplinary team of professionals comprising a special education representative, attendance officer (leerplicht ambtenaar), social worker (welzijnswerk), youth care worker (jeugdzorg), mental-health or healthcare worker, and police. This team is structured to work together in supporting children and youth with emotional, behavioural, developmental and learning difficulties, along with their parents/caretakers and schools. The professionals in the ZAT assess communications from teachers about the possible extra needs of a student. The ZAT offers support, or refers students to (and activates) support (Nederlands Jeugd Instituut, 2012). The ZAT team is broad in its range of expertise, since it is designed for all students who need care - a much broader target group than simply those with disabilities. However, this system is in fact focusing on the 'difficult cases'.

The Dutch VET Council (MBO Raad) offers a platform for students with disabilities in secondary VET. The platform offers, for a small financial contribution, study days for teachers. It also offers advocacy for the interests of disabled students in Dutch
politics, and furthermore offers advice to schools on issues such as financing, law and support. The platform is working towards a situation where both intake and follow-up focus on students' potentials rather than on their disabilities. To reach that point, teachers and other staff need to develop competencies and be willing to do so.

The measures the Dutch government currently proposes aim at realising a more inclusive education system in the Netherlands. The extent to which this process will be successful ultimately depends on the willingness and competencies of the teaching and support staff in our schools. Therefore, it seems important to critically rethink their education and training, the facilities they may rely on and the support they should get from the general public. (Schuman, 2011)

The way these ideas will materialize is not yet defined. Awareness and a positive attitude on the part of teaching staff, along with professionalism, are expected to play a significant role in the level of success.

There is also criticism; for instance, several unions of educators have called policymakers' expectations of teachers in relation to more inclusive education 'superhuman', since for some teachers the many changes will mean a heavier workload. They also call for more attention to students with disabilities in the curricula of teacher training courses, for higher wages for teachers who specialize in working with students with disabilities, and for a better support system (AOB, CNV, CMHF, 2008).

So how are teachers in Dutch secondary VET actually prepared? No national (or international) data could be found on the matter. Teacher training courses give little to no attention to the subject of students with disabilities, according to spokespeople from specialist organisations. Currently, teachers are expected to seek help from specialists, and to educate themselves via internet research or from fellow teachers' experiences. This knowledge gap is filled by a number of subject-specific information suppliers.

However, this has not been researched in detail within the Dutch VET setting. In Chapter 3 of this study the expectancies and attitudes of teachers and other staff are further investigated.

### 2.3 VET in Denmark

Until the end of compulsory school age (16 years), Danish pupils follow integrated basic education (Folkeskole). After that they can choose from two main streams: general secondary education, and vocational education (Visser et al, 2010). The Danish vocational education and training programmes (I-VET) are alternating or sandwich-type programmes, where practical training in a company alternates with teaching at a vocational college. The programmes consist of basic and main components. The student must enter into a training agreement with a company approved by the social partners (a confederation of representatives of employers and employees) in order to accomplish the main component. There are 111 vocational education and training programmes, each of which can lead to a number of vocational specializations. The social partners have considerable influence on, and thus great responsibility for, VET. ${ }^{24}$

The objective of vocational education and training programmes in Denmark is to motivate young people to complete a course of training that can qualify them for

[^12]employment, and at the same time, to accommodate the needs of the labour market. The programmes aim to give young people a taste of further education and active participation in society by developing the students' personal and social skills, like instilling a spirit of independence and cooperation, and stimulating their awareness about innovation, environment and internationalization. Those who have completed VET can immediately work within the line of industry or trade that is the focus of the programme. VET programmes' target groups comprise not only students who come directly after having obtained their basic school education, but also adults with prior vocational experience. About 56,500 students commence full-time vocational education every year, and the total number of students in VET programmes is approximately 130,000 at any given time. Basic vocationally oriented education programmes are offered by 117 institutions, of which 97 are technical colleges, commercial colleges, agricultural colleges or combination colleges. In addition, 20 colleges offer social and healthcare training programmes. A number of the colleges offer their programmes through local branches at addresses other than the main college. There is free admission to the basic VET programme. Most students commence their vocational education with a basic programme at a college, but they can also start directly in a company and take the basic programme after a period of time at the company (EquaVet, 2012). Students with disabilities in Danish VET

According to the Danish Act on the Folkeskole, which applies to all basic school education in Denmark, all children, disabled as well as non-disabled, have a right to at least nine years' basic school education. Basic school education is the responsibility of the local authorities, and it is the local school authorities that make any compensatory measures available to disabled children, e.g. special education, special aids, specially planned teaching materials or any other thing that is necessary to enable the pupil to follow instruction. Students have the option of studying at 'special schools' (Bengtsson, 2010).

In 2005 Denmark had an employment rate of approximately 52 per cent for people with disabilities, and an unemployment rate of approximately 7 per cent (for people without disabilities these percentages are approximately 81 per cent and 4 per cent) (OECD, 2009). Some 47.8 per cent of all young people choose a school career in VET (OECD, 2008).

Vocational education can be a route to employment. The law on vocational education does not contain anything on disability. The students in VET are covered by other legislation. The law on 'special needs educational support in further education'25 states as its purpose to make sure that students with physical or mental health limitations who are enrolled in a further education course will be able to accomplish the education on an equal footing with others. This is achieved by offering special needs educational support. The scheme is run by the Danish Educational Support Agency, which is set up to administer the general financial support that is given to all students.

### 2.3.1 Law and the Danish education system

The teaching of children, young people and adults is regulated by a number of acts, and, with one exception (the Act on Special Education for Adults, 1980) the general provisions on special education are contained within the ordinary acts applying to the school area in question. In Section 3 of the Act on the Folkeskole, it is laid down that

[^13]"Special education and other special educational assistance shall be given to pupils whose development requires special consideration or support", and it is directly mentioned that these provisions may contain deviations from the subject range of the school, the provisions on proficiency assessment and the weekly timetable. ${ }^{26}$

According to this law, special needs educational support can be given to a student who has special needs because of physical or mental limitations. The law contains very detailed regulation of the time limits for support, depending on which education programme the student takes. Likewise, the definition of active study is also detailed. The support is applied for at the educational institution itself, and the institution is paid the expenses defined by the decision. The Danish Educational Support Agency is entitled to receive information from all public authorities to aid in their decision.

### 2.3.2 Definition of SEN in Denmark

There can be various ways of supporting students, including financial supports, sign language interpretation, Braille printing among other measures. Since 2004, the educational support law contains a supplement for students with disabilities. Most non-disabled students supplement their study support with a study job. If the disabled student is not able to have such a job alongside their study, they will be entitled to a supplement instead. The ordinary study support is $€ 723 /$ month, whereas the disability supplement is $€ 1,028 /$ month (Bengtsson, 2010).

Teachers in VET programmes have normally completed a vocational education in the subjects in which they teach and have typically followed up with higher education. A minimum of five years' professional experience is required, but only two years' professional experience for teachers in the general subject areas. The teachers of general subjects normally have a Bachelor or Master's degree. Teachers who do not already have pedagogical training must take a specially organized pedagogical training course for vocational college teachers. This training must normally be completed within the first two years of appointment to a job at the college. The individual teacher is obliged to keep his/her academic and pedagogical knowledge up to date. The college is required to draw up a plan for the competence development of the teacher's group at the college. On this basis and in cooperation with the teacher, the college determines the individual's professional upgrading. ${ }^{27}$ Besides these requirements for the professionalism of teachers in VET, there is no indication that they are especially equipped to work with students with disabilities, or of their attitudes towards doing so (EquaVET).

### 2.3.3 Concluding comment

The Danish VET system is, like the Dutch system, aimed at providing students with skills for work, for higher education and for civil life. The Danish VET system is open to students with disabilities, and they are protected under a number of (antidiscriminatory) laws. Schemes are detailed and regulated. VET institutions are provided with extra funds and support to cater for this group. Teachers are highly professional, yet there is no indication that they are specially prepared for working with students with disabilities.

[^14]
### 2.4 VET in Germany

VET in Germany is characterized by two paths: full-time school, and the dual system. The full-time vocational schools prepare young people for work or vocational training (usually within the dual system) in many occupational areas (for instance, commercial, care services, languages-related, artistic or tradesmen's professions) and have the highest number of students. Depending on the course of study, their duration can be from one to three years. The usual entry requirement is the successful completion of general secondary school.

The dual system takes place in vocational schools and companies, and is a way of preparing young people for the occupation they will pursue in the future and of integrating them in society. Their duration is usually three years, with some courses being as short as two years, and others as long as three and a half years. Every young person who has completed full-time compulsory education has access to dual vocational training. Students may undertake a year of basic vocational education, which can then be used in the second year of the dual system of training. The vocational school is an autonomous place of learning. Its task is to provide basic and specialized vocational training and to extend previously acquired general education (EquaVET).

Approximately two-thirds of an age cohort undergo initial VET, while one-quarter choose university education and about 10 per cent remain unskilled. Among those choosing VET, two-thirds enrol in dual-system VET, 27 per cent in vocational schools and 7 per cent in external training centres. Apprentices in the dual VET system receive pay from their employer (the amount is fixed in collective wage agreements); the school part is financed by the state. Given the importance of the dual VET system, the German government expends considerable amounts of public funds to make up for shortages in the number of in-company training places. The Federal Employment Agency, the federal government, state governments and the European Union finance a broad spectrum of training place programs (BIBB, 2006).

## Students with disabilities in German VET

In 2005 Germany had an employment rate of approximately 41 per cent for people with disabilities, and an unemployment rate of approximately 26 per cent (for people without disabilities these percentages are approximately 65 per cent and 11 per cent) (OECD, 2009). Some 59.4 per cent of all young people choose a school career in VET (OECD, 2008). Vocational education and training could play a role in improving these statistics. However, for certain groups it is extremely difficult to take up initial vocational training. This applies in particular to young people with learning difficulties and young people with disabilities. Specific support is required to enable these people to access training or work (Hippach-Schneider et al, 2007).

Germany is a federal republic. The sixteen federal states ${ }^{28}$ have been granted exclusive legislative powers in school education and higher education. Thus, when dealing with education in Germany, one is confronted in actual fact with sixteen school systems, which differ in certain aspects. Yet the system of vocational education and training is standardized on a national scale. VET in this country focuses on a system of apprenticeship which allows young people in vocational training to learn

[^15]within a private company as well as in a state-run school. The higher education system is also regulated by a national framework law, but university affairs are mainly the responsibility of the federal states (Waldschmidt and Meijnert, 2010).

### 2.4.1 Law and the German education system

With reference to the vocational education and training of people with disabilities, both the Vocational Training Act and the Trade and Crafts Code provide for this group, in principle, to be trained in recognized training occupations just like non-disabled people. Special provisions of these two regulations allow for adaptations and support in training programmes and assessment requirements according to impairmentspecific needs. For instance, time schedules, curricula and assessments can be adjusted, apprentices are entitled to special needs support, young people who are deaf have the right to a sign language interpreter during their vocational education, training and respective exams, etc. For the majority of young people with disabilities there are no in-company contracts, but recognized training occupations according to the federal regulations, organised by non-profit (charity) organisations and/or local authorities, and financed by public money. Recent years have seen much effort to improve the VET situation; there are special laws, new instruments of assessment and support, several programmes at national and federal levels, and in general much goodwill, but there is no clear-cut, consistent concept of prioritizing the equality and inclusion of young people with disabilities in the field of VET.

Official data indicates that the vast majority of young people with disabilities are offered some form of VET. For 2003/2004, 740,165 young people had applied for an apprenticeship in the dual system, according to the Vocational Training Act and the Trade and Crafts Code. Of these young people, 5.1 per cent were classified as having a disability ( 23,969 men; 13,802 women). The comparison with the year before indicated an increase of 5.4 per cent in disabled applicants (non-disabled: 2.7 per cent). Yet the numbers of successful placements should be viewed with a critical eye, as statistics count not only contracts with private companies as successful cases, but any form of VET. Only 50 per cent of the disabled applicants become integrated in standard VET. In comparison, 90 per cent of the young people without disabilities do their VET in regular in-company programmes, and only 10 per cent attend other programmes (Waldschmidt and Meijnert, 2010).

Germany also puts emphasis on the goal of equal opportunities. The main legal bases for this policy are Book Nine of the Social Code (SGB IX) and the Act on Equality for People with Disabilities (BGG). The set of measures promoting VET and employment for people with disabilities currently include:

- Benefits for employers, including: a subsidy to the apprentice's pay if the person concerned would otherwise be unable to undergo VET in a recognized way; a subsidy to the apprentice's pay for severely disabled people; a subsidy to the fees of VET of particularly severely disabled young adults; fees claimed by the Chamber of Industry and Commerce or the Chamber of Crafts; creation of new work and training places for severely disabled people; a subsidy to work integration (subsidy to wages) for those with particularly severe disabilities; subsidy for work aids (Arbeitshilfen) in the company.
- Advice and information: concerning all questions related to disabilities; concerning all questions related to employment and VET; concerning individual needs for coaching, etc.
- Benefits for severely disabled people: financial promotion; technical work aids; initial and replacement acquisition of work aids; maintenance and repair; training in the use of the aids; motor vehicle aids; measures for sustaining and broadening professional knowledge and skills (BIBB, 2006).

The Federal Employment Agency offers individual advisory services for pupils with disabilities and their parents while the children are still at school. There are prevocational measures for young people who are not yet ready for training, and employers who train young people with disabilities receive state grants towards training costs and to make workplaces accessible for people with disabilities, as described above.

External training for people with disabilities is provided at a high level. If a school decides to offer integrative education, it can apply for public funding for accessibilityrelated adjustments, for additional teaching support and other non-teaching staff. Government training programmes are usually well adapted to the needs of disabled trainees; a private business that is willing to take on disabled apprentices can apply for a subsidy or a credit for technical and building adjustments of individual training locations or workplaces.

There are indications that in North Rhine-Westphalia efforts have been made in recent years to include issues of special education and disability in the curricula of regular teacher training courses (Waldschmidt and Meijnert, 2010). There is no clear indication that this stance is being adopted across the federal states.

### 2.4.2 Definition of SEN in Germany

The current definition of special educational needs throughout the Federal Republic of Germany refers to specific support for disabled pupils exclusively. ${ }^{29}$ Pupils experiencing problems as a result of certain impairment and/or in need of additional educational support because of problematic situations, as well as students with temporary learning difficulties (e.g. slow learners, literacy difficulties) are supported by a combination of various measures within the general system of support. Remedial or individual educational programmes based on the general structure offer support for problem situations during the learning process. The Federal Republic of Germany has a comprehensive framework of special measures targeted to provide additional advice and support for all kinds of situations that might occur in daily school life.

### 2.4.3 Concluding comment

The sixteen federal states have exclusive legislative powers in school education. In fact there are effectively sixteen different school systems. In general, the German VET system is characterized by the strong 'dual system'. Because of this, emphasis lies on employer-facilitated study, in the workplace. In the VET system there are special laws, new instruments of assessment and support, several programmes at national and federal levels, and in general much goodwill. However, access for students with disabilities is reported as difficult. There are indications that in at least one state regular teaching staff (will) receive some preparation in working with students with disabilities. Overall, and compared to the other selected countries, efforts are made to include students with disabilities in VET. However, there is no clear-cut, consistent

[^16]concept of prioritizing the equality and inclusion of young people with disabilities in the field of VET (Waldschmidt and Meijnert, 2010).

### 2.5 VET in Australia

The Australian VET system provides training across a wide range of subject areas and is delivered through a variety of training institutions and enterprises (including apprenticeships and traineeships), for students of all ages and backgrounds. Students have many options for training and may study individual subjects or full courses leading to formal qualifications. Training takes place in classrooms, in the workplace, online and through other flexible delivery methods.

Providers of VET in Australia include not only technical and further education (TAFE) institutes, but also universities, secondary schools, industry organisations, private enterprises, agricultural colleges, community education providers and other government providers. Funding is provided by the Australian government, state and territory governments, industry bodies, employers and enterprises, and individual students through fees (NCVER, 2012). In other words, when one refers to VET in Australia it is a much wider field than secondary VET as referred to in the Netherlands.

There are over 1.7 million VET students in almost 5,000 registered training organisations in Australia. While there are around 3,700 private training providers of VET, most VET students are engaged with publicly funded training providers (Australian Bureau of Statistics, 2009).

### 2.5.1 Law and the Australian education system

VET is regulated by a variety of Australian, state and territory laws. Employment, workplace and equity issues and safety issues are also covered by a range of Australian, state and territory legislation. Fundamental to the VET system are a number of Australian laws which regulate the content and structure of VET. For students with disabilities, the human rights legislation that protects people involved in the training system is of relevance. Under this legislation (the Disability Discrimination Act 1992) it is unlawful to discriminate against or harass people at work, at school or in the community, to reveal their personal information, to infringe upon their physical privacy or communications.

### 2.5.2 Students with disabilities in Australian VET

In 2003 Australia had an employment rate of approximately 40 per cent for people with disabilities, and an unemployment rate of approximately 8 per cent. For people without disabilities these percentages are approximately 80 per cent and 4 per cent (OECD, 2009). Some 61.6 per cent of all young people choose a school career in VET (OECD, 2008). Given the significant role that VET plays in achieving employment outcomes for individuals, the significantly lower participation level of people with disabilities in VET is of very great concern. Of the Australian working-age population, 16.8 per cent have a disability, but only 7.2 per cent of VET students report having a disability (Bagshaw and Fowler, 2008). The Australian Bureau of Statistics reports that the proportion of people aged 15-19 years studying in VET was higher for students with disabilities than for those without disabilities. In 2009, 34 per cent of 15-19 year olds with specific restrictions were studying VET. This is in comparison to 19 per cent of $15-19$ year olds with no disability (Australian Bureau of Statistics, 2009).

It is recognized that the training of VET staff is an important issue in improving the situation of students with disabilities in Australian VET. VET teachers/trainers and
support workers need to be acquainted with the available technologies that make access and participation easier for learners with disabilities. A good understanding of the technology available can assist learners in becoming less dependent on, for example, note-takers and support workers (Productivity Commission, 2011).

The skills and confidence of teachers and trainers are known to be crucial in improving student participation and retention outcomes, particularly for those students who require additional support or assistance. In 2008, the Business Council of Australia commissioned the Australian Centre Education Research to analyse teachers' professional training. The results indicate that teachers felt inadequately trained to deal with the demands of the classroom. It is reasonable to assume that this concern would be amplified for teachers faced with the additional challenges of assisting students with high support needs. A 2007 survey of the VET sector, commissioned by the Australian Council of Private Education and Training, also produced similar findings. VET and TAFE professionals self-identified their need for greater disability training in order to build their 'disability confidence'. Hence, workforce development is an essential feature in raising participation and retention levels for students with a disability (Bagshaw and Fowler, 2008).

### 2.5.3 Definition of SEN in Australia

Each state and territory has a different definition of a student with special educational needs. However, there are a number of disability types recognized by all: physical disability, hearing and vision impairment, intellectual disability and autism spectrum disorder (OECD, 2012). Some 6 per cent of the 1.7 million students enrolled in the public Australian VET system report having a disability (NCVER, 2007).

### 2.5.4 Concluding comment

Australia has a low employment rate of people with disabilities, but also a low participation rate of students with disabilities in VET. Even though the position of this group is protected by a number of anti-discrimination laws, there are questions as to how much society is willing to invest in removing barriers for this group. Researchers suggest that this is due to low expectations held by the community as a whole of people with disabilities. It is recognized by government, scholars and VET teachers themselves that VET staff need to be better equipped for working with this group, for instance by becoming better acquainted with methods of assisting students with disabilities and by building 'disability confidence'.

## 3 Survey of VET schools in the Netherlands

### 3.1 Introduction

One important outcome of the literature research, described in Chapter 2, was the recurring suggestion that the attitudes of educators are essential for the successful education and integration of students with disabilities in Dutch VET. Interviews with stakeholders in the Netherlands suggest that students with disabilities are often referred to as 'the educators with the positive attitude'. Having the 'right attitude' seems to be relatively ambiguous and dependant on personal interests: when focusing on the Netherlands, no evidence was found that teachers in Dutch VET are systematically trained or otherwise prepared for working with students with disabilities. Indeed, there is no reference to working with students with SEN in the "Standards of Competence (Teaching Staff) Decree" (in the "BIO Act", which describes the competencies needed to be a teacher), and interviews with stakeholders suggest that teachers are not well prepared.

For instance, in discussions that took place during the literature review phase, the spokesperson of the MBO platform observed that little to no attention is given to the group 'students with disabilities' within the teacher training curriculum. The platform notes a trend towards introducing more and more responsibilities and tasks into the primary process - that fall on the teachers. The competencies teachers must have in order to be capable of absorbing these responsibilities are not defined. They have to be able to work with 'differences' within the group of students in the classroom, according to the experts interviewed. The platform regards working with students with behavioural disabilities to be the hardest task for teachers and working with students who have only physical disabilities to be the mildest task.

It was clear that a further step was needed, after the literature review: an exploration into the preparation of Dutch VET teaching staff to work with students with disabilities. This next step involved a survey of mainstream VET educators. The general questions were:

- What are the awareness levels of, and attitudes regarding, students with disabilities?
- How are regular teachers in VET prepared for working with students with disabilities? If necessary, how can this be improved upon?

The underlying overall concerns are the barriers, visible and invisible, that hinder students with disabilities in undertaking VET training, eventually leading to employment.

### 3.1.1 Current issues in the Netherlands

As described in Chapter 2, VET school management focuses on minimizing risks (high diploma rate, low dropout rate) and consequently may be reluctant to invest time and effort in a relatively small group of students perceived as being higher risk in terms of school success. Many VET schools weigh up whether a given student with a disability or chronic illness will be able to complete all parts of the training course and successfully complete the training, and/or will be able to work in the profession for which the training is intended (Tudjman et al, 2009). It is probable that management is reluctant to invest in students who constitute a higher financial risk. The delegation of budgetary distribution to individual schools rather than to individual students,
effective as of August 2014 with the introduction of passend onderwijs ('appropriate education'), is likely to have some bearing on this matter.

Is a VET school allowed to refuse a student when the intake shows that this student, because of his or her disability, probably will not finish the training in the given time? Education at the first level of VET ${ }^{30}$ is open to everyone, but at higher levels (two to four) the school makes admission decisions, bound by legal regulations. The admissions policy must be consistent and publicly accessible. VET schools are obliged to ensure accessible education for all. Refusal of students on the sole basis of the higher financial risk they may constitute is not compliant with that principle (www.mbo15.nl) ${ }^{31}$.

Overall, the inclusion and acceptance of students with disabilities in Dutch VET seems to be partly subject to the willingness and cooperation of the staff involved, and may be constrained by funding (and possibly other) conditions. Little is known about the attitude and preparation of educators in Dutch VET. This study is a pilot exploration of this theme.

### 3.2 Researching VET schools - Methodology

### 3.2.1 Selection of VET schools

There are 67 VET institutions in the Netherlands (www.mboraad.nl), of which 43 are Regional Educational Centres (ROCs), 11 are Agricultural Educational Centres (AOCs) and 12 are specialized trade schools. For the purpose of the exploratory research, it was decided to focus on the ROCs for the following pragmatic reason: the ROCs are by far the biggest schools, with an average of around 30,000 students, while AOCs and trade schools have an average of 2,000 students; thus, it was more likely that respondents who deal with students with disabilities could be identified there.

Ten ROCs were chosen on the basis of:

- Location (within the Randstad ${ }^{32}$ or not);
- Size, determined by the yearly intake of students - those with over 4,000 new students each year were categorized as large; those with fewer than 2,500 new students each year were categorized as small. ${ }^{33}$

The rationale in making these two distinctions is that students with disabilities arguably constitute a proportionally greater direct (financial) risk for smaller schools in comparison to larger schools. It was assumed that this could lead to smaller schools having different priorities to those of larger schools, which could in turn lead to different behaviour or attitudes towards students with disabilities.

[^17]
### 3.2.2 Interviews

Following the literature research, a series of exploratory, structured interviews with teachers/staff in VET schools were conducted by telephone to gain a qualitative insight into the attitudes, competencies and preparation of the people who work with students with disabilities in VET schools. Information was sought on three main topics:

- the registration of students;
- the attitudes of staff; and
- preparation for working with students with disabilities and the self-sufficiency of staff.

Regarding registration, respondents were asked about the number of students with disabilities and the types of disabilities concerned, since reliable statistics were not available from the schools' administration.

Regarding attitudes, the aim was to test what is suggested in the literature - namely that teachers who have experience with students with disabilities have a more positive attitude than teachers without any experience. To gain this and other insights into educators' attitudes towards students with disabilities, questions from a 25 -item existing attitude test were used in the interviews - the 'Opinions Relative to Integration of Students with Disabilities Test', or ORI (Antonak and Larrivee, 1995) (see Appendix 1).

Finally, a short list of factual questions was developed about the preparation of teachers and other staff to work with students with disabilities. Besides the preparation, it was important to somehow assess staff perception of their own effectiveness while working with students with disabilities in a school setting. The statements used were drawn from the 'Teacher Self-Efficacy for Inclusive Practices Scale', or TEIP (Sharma et al, 2012.) and are detailed in Appendix 1.

### 3.2.3 Data collection and response

## Data collection

The data collection had the following stages:

- The websites of ten selected schools were studied, and individuals with some coordinating role concerning students with disabilities were identified.
- Letters were sent to these individuals(contact persons) explaining the purpose of the research and inviting the school to participate. Any school which refused to take part (often after lengthy internal deliberation) was replaced by another school comparable in location and size. Eventually ten willing schools were found. Reasons given for non-participation varied from "not the right moment: too hectic" to an overload of research questions. The subject, however, gave rise to interest, and all recognized its importance.
- The contact individuals were asked to identify around 10 to 15 teachers and other staff within their VET school who were willing to answer questions on the topic. Most contacts in the VET schools had to search internally for these staff members, and ask their permission to provide their contact details. Schools are, in general, very reluctant to provide individual information, including for research purposes., and this proved to be the case in this exploratory study also. Finally seven schools returned a list of teachers and staff willing to be interviewed. The three remaining schools withdrew at a later stage of the research due to time constraints.

The seven schools supplied the contact details of 95 people, who were all contacted individually by the research team to confirm their willingness to be interviewed. Eventually, 48 people were actually available for interview during the research period.

## Response

The respondents came from schools that were distributed evenly across the Randstad conurbation and 'Other', or beyond the conurbation. There were no respondents from small schools outside the Randstad.

Table 4: Respondents, distributed by location and size of ROC. $\mathbf{N}=\mathbf{2 8}$

|  | Large (>4 000 intake <br> per year) | Small (<2 000 intake <br> per year) |
| :--- | :--- | :--- |
| 'Randstad' | 20 | 8 |
| Other | 20 | 0 |

The respondents were asked to state their function/role within the VET school. Although this was an open question, the following groups were recognized.

Table 5: Roles of respondents

| Teacher/supervisor | 12 |
| :--- | :---: |
| Career advisor | 16 |
| Coordinator | 11 |
| Policy advice/behavioural expert | 9 |
| Total | 48 |

One-quarter of respondents were in a direct teaching role; a third were career advisors - often also dealing with intake; a quarter had a coordinating function; and a fifth dealt with policy advice, research and so forth.

Of the respondents, 14 were male and 34 female. Of these 48 people, 32 were aged 50 or over, 7 people were aged between 40 and 50 , and 9 people were younger than 40. The group was as a whole a relatively experienced one, with most respondents claiming over 10 years of experience in VET.

Table 6: Experience in VET and with students with disabilities (in years).

| Respondents | Experience in VET | Experience with <br> students with <br> disabilities |
| :---: | :---: | :--- |
| 5 or fewer | 8 | 14 |
| 6 to 10 | 12 | 10 |
| 11 to 15 | 8 | 8 |
| More than 15 | 20 | 13 |

Cross-tabulating both variables, just six people (12 per cent) had experience with students with disabilities before starting to work in the VET sector. Fifteen people (31 per cent) worked in VET first, and later started working with students with disabilities. The remaining respondents ( 56 per cent) started both in the same period.

### 3.3 Results

Number of students with disabilities
Respondents were asked to comment on the registration numbers of student with disabilities in their schools.

Figure 6: Are all students with disabilities in your school registered as such?


All respondents distrusted the accuracy of registration numbers. This was the case across the different groups (such as large and small schools, location, function of the respondents). However, results indicated that trust in the accuracy of registration numbers seemed to be related to the number of years respondents had worked with students with disabilities. Respondents with over ten years' experience were less negative, with 53 per cent expecting that not all students with disabilities are registered as such, as opposed to 72 per cent of respondents with fewer than ten years' experience. ${ }^{34}$ Overall, most respondents thought that not all students with disabilities were registered as such. Asked why they thought the official registration numbers don't accurately reflect the true figures, respondents cited several possible reasons:

- Firstly, the registration itself can be unclear - for example, errors can creep in during the transfer from VMBO (the pre-VET schools, providing most VET students) to MBO (secondary VET), or different criteria may be used in different school types.
- Secondly, the motive for registration can be focused on financial issues: LGF students bring 'extra funds' (the so-called 'backpack') and are automatically registered. The result can be that students with disabilities who did not apply for LGF are not registered as having a disability.
- Thirdly, students may not report their disability at intake, so as to avoid the stigma of being labelled 'disabled' or because not mentioning their disability might increase their chance of admittance.

Respondents were asked (without checking with their administration) how many students with disabilities were enrolled in their VET school. The answers varied considerably between schools, but also within schools. The figures given were too unreliable to be regarded as accurate. This suggests two possibilities:

- The questions asked were too unclear and the answers given did not refer to the same level of organization. Was it about the school as a whole, or a

[^18]particular department? This argument can be refuted, since the variety of answers is spread equally, not just high versus low numbers.

- The respondents didn't know exactly, and guessed. We can conclude from this that the awareness of the numbers of students with disabilities is low amongst the respondents.
Respondents felt that students with behavioural and/or psychiatric disorders (Cluster 4) greatly outnumber those from the other three clusters in the schools (see Tables 2 and 3). Furthermore, only one respondent was currently engaged (in a VET course) with students with hearing impairments (Cluster 2). All other respondents dealt solely with students from Cluster 4.

This suggests that, when answering questions on 'students with disabilities', respondents are referring mainly to students with behavioural and/or psychiatric disorders (Cluster 4), rather than to students with other types of disabilities.

### 3.3.1 Attitudes

The ORI Test explores views and attitudes on (1) benefits of integration; (2) integrated classroom management; (3) perceived ability to teach students with disabilities; and (4) special versus integrated general education. The questions were translated into the Dutch language and were, where necessary, adjusted to reflect the Dutch VET situation (where there is not a distinct line between a special and a mainstream education and training, and no distinct notion of 'classrooms'). Questions on the fourth factor (special versus integrated) were not used, since Dutch VET does not have a special stream.

As suggested in Chapter 2, interviewees suggested that students with disabilities were more or less centred around 'willing' teachers. This means that we can expect some variation in 'attitude'. For instance, the literature suggests that teachers who have experience working with students with disabilities have a more positive attitude than teachers who have no previous experience with such students.

Initial factor analysis of responses to selected items of the ORI, using the 'Kaiser-Meyer-Olkin Measure of Sampling Adequacy', yielded a score of .45, indicating that the sample was too small to use this analytical approach Therefore responses are reported independently, grouped as in the ORI.

## Integration of students with and without disability

Figure 7: Perceived benefits of integrating students with disabilities into general groups


1 Completely disagree - 2 disagree - 3 agree - 4 completely agree.
Respondents were rather positive about the benefits of integration. On average they did not think the behaviour of students with disabilities would set a bad example, or that it would have negative consequences on the acceptance of differences. However, respondents from smaller schools were more likely to agree ${ }^{35}$ on the items "The presence of students with disabilities will not promote acceptance of differences on the part of students without disabilities" and "The extra attention students with disabilities require will be to the detriment of the other students", suggesting that they are more concerned. No significant differences were found on other characteristics, such as the location of the school and the respondent's level of experience.

[^19]
## Classroom management issues relating to integration

Figure 8: Perceived classroom management issues relating to the integration of students with disabilities


1: Disagree completely - 2: Disagree -3: Agree - 4: Agree completely.
Again, respondents overall expressed that they are not negative regarding the behaviour of students with disabilities in the classroom. However, they do seem to agree that 'the general group/classroom' needs to be changed to adapt to these students. Interestingly, respondents did agree on the idea that increased freedom creates too much confusion for the student with a disability.

Significant ${ }^{36}$ differences were found between respondents from large and small schools. The latter were significantly more negative: they were less likely to agree that "Most students with a disability will make an adequate attempt to complete their assignments" and "It is not more difficult to maintain order in a general classroom that contains a student with disabilities than one that does not contain a student with

[^20]a disability", and more likely to agree that "Students with disabilities are likely to create confusion in the general classroom".

Respondents who had more experience (over 10 years) with students with disabilities were significantly less likely to agree that "It is not more difficult to maintain order in a general classroom that contains a student with disabilities than one that does not contain a student with a disability", compared to respondents with less experience. This suggests that more experienced respondents found the presence of a student with disabilities more challenging to the maintenance of order in a general classroom than did respondents with less experience.

Respondents who were teachers were significantly more likely to agree that "The student with a disability will be socially isolated in the general classroom" compared with those not in a teaching role. Since it can be assumed that teachers have the most 'hands-on' experience of group dynamics, this could be cause for concern.

## Ability to teach students with disabilities

Figure 9: Perceived ability to teach students with disabilities



1 Completely disagree - 2 disagree -3 agree -4 completely agree.
Respondents were clear: in general it doesn't matter who does the teaching, but the general-education teachers are in need of extra training to perform their tasks well.

All respondents shared these views; no differences were found between characteristics of the respondent groups. It can be concluded from this that respondents are not very confident about the competencies of educators to deal with students with disabilities. This fits general findings that teachers do not always feel prepared and competent to fulfil the different roles that are part of this practice (van der Meijden et. al., 2009).

### 3.3.2 Perception of efficacy

Besides the preparation, it was deemed important to 'measure' in some respect the staff members' perception of their own effectiveness while working with students with disabilities in a school setting. To gain an insight, items from the 'Teacher SelfEfficacy for Inclusive Practices Scale' (TEIP) were used. This 18-item instrument proved to be a reliable descriptor of on-task behaviour, and also a reliable predictor of teachers' requests for 'emergency support'. The TEIP has the potential to measure teachers' feelings of competence in inclusion classes (which is the case in Dutch VET). It was originally is centred around three factors: efficacy in using inclusive instructions; efficacy in collaboration; and efficacy in managing behaviour.

As in the case of the attitudinal scale, the sample was too small for a factor analysis of the results. Therefore the findings are reported independently, grouped as in the TEIP.

Figure 10: Perceived competencies in instructing students


1 Completely disagree -2 disagree -3 agree -4 completely agree.

Overall, respondents were confident of their own competence in teaching classes containing students both with and without disabilities, especially concerning personal interaction. When it came to more 'technical' tasks ( such as designing learning tasks) the respondents were a little more hesitant. No differences were found between respondent groups.

### 3.3.3 Professional collaboration and teamwork

Figure 11: Perceived possible collaboration with professionals in relation to students with disabilities


1 Completely disagree -2 disagree -3 agree -4 completely agree.

Respondents who were teachers were significantly more likely to disagree with the statement "I am confident in informing others who know little about laws and policies related to the inclusion of students with disabilities" as compared to respondents who had a role other than teaching. On the other statements no differences between respondent groups were found. Overall, on the 'collaboration items' respondents tended to agree that there was the possibility to work with other staff members in teaching students with disabilities. This suggests that, within schools at least, professionals do not feel alone in their task.

### 3.3.4 Managing disruptive behaviour

Figure 12: Perceived competencies in managing deviant behaviour in the group


[^21]Respondents in teaching roles were significantly more likely to agree with the statement "I am confident in my ability to prevent disruptive behaviour in the classroom before it occurs" in comparison to non-teaching respondents. This difference was also found in the case of respondents who had over 10 years of experience (this group being more confident), but it was not statistically significant (.07). Respondents were least confident in dealing with physical aggression, most confident in calming a noisy/disruptive student.

### 3.3.5 Preparation for working with students with disabilities

Teacher training courses pay little to no attention to the subject of students with disabilities, according to spokespeople from specialized organizations (see section 2.2.5). Teachers are currently expected to seek help from specialists and to educate themselves via internet research or from colleagues' experiences.

Respondents were asked to answer the question "How are you trained to work with students with disabilities?" by selecting one or more responses.

Figure 13: How are you trained to work with students with disabilities? (Number of respondents)


The responses show that training on the job is the most prevalent means of preparing to work with students with disabilities. Of the 48 respondents, just over half ( 25 individuals - 52 per cent) did mentioned having received any training at all.

When asked how the preparation of educators to effectively include students with disabilities in the classroom could be improved, respondents mentioned the following measures: ${ }^{37}$

- Extra training
- More experience: one learns on the job
- More mentoring during the job
- Work on minimizing distrust of students with disabilities
- Improve per-to-peer communication within school

[^22]In summary, most respondents were not formally prepared to work with students with disabilities, but learned it 'on the job'. The second most frequent method of preparation mentioned was 'special training', followed by 'via an external specialist'.

## 4 Conclusions

As a group, young people with disabilities face greater difficulties in acquiring skills and finding employment than young people without disabilities: unemployment rates are higher; school success rate is lower. Vocational education in particular seems to be an appropriate route for this group to enhance their chances. This study was conducted to explore how Dutch VET is currently addressing this issue, looking at the theme from the viewpoint of the training providers.

### 4.1 Summary

## Literature review

The study started with a review of the literature to explore the question: 'What is known about policies, implementations, and statistics regarding students with disabilities in vocational education'? (Chapter 2)

Literature and policy documents in the Netherlands were explored, and a short overview of VET provisions in three other countries (Denmark, Germany and Australia) was compiled, for comparative purposes, mainly via local contact people in VET. Limited literature and policy documents were found describing the situation of students with disabilities in vocational education in the Netherlands and in the selected countries. The study findings give the impression that the VET educational sector does not pay too much attention to students with disabilities. Nevertheless, governments do initiate policies to include students with disabilities in regular VET. They do this via regulations (for instance anti-discrimination legislation) and via funding, making it easier for institutions and related businesses to offer training and apprenticeships to students with disabilities. There are also support systems in place to provide specialized care.

VET is a relatively large educational sector in the Netherlands. Dutch VET has a threefold mission: to prepare students for work, for civil life and for higher education. Naturally, the group 'students with disabilities' is very heterogeneous. VET is open to all students alike; students with disabilities can benefit from extra financial assistance providing that they are 'indicated' in one of the four clusters (see Figure 2). This financial system will change in August 2014: financing will no longer be related to the individual, but provided to the school in a lump sum.

Although the distinction between different groups of students with disabilities is somewhat unclear, the number of youth with physical disabilities in the Netherlands lies at around 300,000 children aged 6-19. In vocational institutes, around 2,000 students are indicated in Clusters 1, 2 or 3 . The majority of students in Dutch VET indicated as having a disability are found in Cluster 4; around 5,500. These students participate in VET with individual financial support from the government. Many more students report that they are physically handicapped in some way; however, there are no data on the nature and severity of these handicaps. Little is known about the true number of students with disabilities in Dutch VET. The government currently keeps
track of the number of individual financing packages (LGF) ${ }^{38}$. However, not all students with disabilities apply for a LGF, and experts claim there is a larger number who are not classified as such but need the same support. The proportion of students with disabilities registering as such in schools is reportedly very low.

No documents were found that suggest that teachers in Dutch VET are systematically trained or prepared for working with students with disabilities. Indeed, there is no reference to working with students with SEN in the "Standards of Competence (Teaching Staff) Decree" (the "BIO Act"), and interviews with stakeholders in Dutch VET schools suggest that they are not well prepared. However, there are several support systems in place, ranging from ambulant specialists to websites with 'tips'. Even though the attitudes and awareness of educators is referred to as essential for successfully educating students with disabilities, no studies are found on this matter. Interviews suggest that this depends on individual motivation from the staff.

Similarly, in Denmark, Germany and Australia some statistics were found, but few documents on students with disabilities in secondary VET. From the documents that were found, the conclusion can be drawn that Denmark and Germany show a similar situation to that in the Netherlands: the law which affects VET guarantees equality for students with or without disabilities, and several regulations (i.e. financial) are being put in place to make it easier for students with disabilities to participate. The bottleneck seems to lie in the preparation and education of educational staff. Little literature is found on that issue, but it showed that on that level (educating and supporting VET staff) many improvements must be made. There seems to be some awareness of this issue: at least one state in Germany suggests that the curricula of regular teacher training courses should on a short-term basis address the issues of students with disabilities. In Australia, the statistics and documents were not only concerned about the preparation, education and willingness of VET staff, but also about the participation of students with disabilities.

In short, by law and practical implementation, all people with disabilities in the Netherlands can be reached by vocational skills training. The task of Dutch VET is to offer training that is relevant for the labour market, for all students. The standards are equal for all students. All vocational institutions provide services to people with disabilities, with or without (financial) support.

In general, students with disabilities in all selected countries are protected by antidiscrimination laws. In the Netherlands, Denmark and Germany, individual financial support and institutional financial support is regulated. There are also provisions for companies that provide work-based training. In general, regular teachers and instructors in VET are not given specific training for working with students with disabilities, but there seems to be an awareness of the need to improve professional competencies regarding working with diversity amongst students.

The literature review found no information on the differences between studying in the school-based track and the dual track in Dutch VET. The latter is characterized by learning 'in the workplace', with instructors from school and the company. Little is known about how exactly learning takes place in the dual track for VET students as a whole, let alone for students with disabilities.

An important issue that seems to be insufficiently addressed is that of 'human capacity'. The staff of VET institutions do not possess - as standard - the knowledge,

[^23]skills, and attitudes necessary to provide services to people with disabilities. That seems to be subject to individual interests.

## Exploratory survey of mainstream VET instructors

The literature review provided the backdrop for a survey of mainstream service providers, especially the instructors or teachers, described in Chapter 3. The second question presented in the introduction, "What are the perspectives of suppliers of vocational education on the inclusion of students with disabilities, and what problems do they encounter?" seems to be crucial in determining the possibilities for students with disabilities in Dutch VET and the route to improving their chances in skills acquisition and preparation for employment.

This survey was carried out using a series of structured interviews by telephone with staff in VET schools to gain a qualitative insight into the attitude, competencies and preparedness of people who work with students with disabilities in VET schools. Statements used were taken from the "Opinions Relative to Integration of Students with Disabilities Scale", or ORI, and from the "Teacher Self-Efficacy for Inclusive Practices Scale", or TEIP (see Appendix 1). Staff from ten schools participated.

Altogether, 48 respondents were interviewed: teachers, careers and policy advisors, and coordinators. The respondents varied widely in their estimation of the numbers of students with disabilities enrolled in their schools. Hence, the quantitative scale was unclear for them. Little experience was claimed in working with students best described as belonging to Clusters 1, 2 or 3 . Answers predominantly concerned students from Cluster 4 - children with behavioural and/or psychiatric disorders.

Respondents proved to be rather positive about the benefits of integrating students with disabilities into general groups. On average they did not think the behaviour of students with disabilities would set a bad example, or that it would have negative consequences on the acceptance of differences. Respondents overall showed no negative attitude towards the behaviour of students with disabilities in the classroom. However, they did seem to agree that 'the general group/classroom' needs to be changed to adapt to these students' needs.

Interestingly, respondents agreed on the idea that increased freedom creates too much confusion for the student with a disability. Since 2012, all courses in Dutch VET work with competency-based goals. In secondary VET centres in the Netherlands, selfregulation of learning strategies is an essential practice in pedagogy. Teachers support behaviour towards self-regulation using various instruction formats such as independent group work, project-oriented learning and project-based learning. These approaches focus on the necessity of pedagogical flexibility and a learner-centred approach, providing the opportunity for learners to recognize their autonomy and thereby acknowledge the value of their tasks (European Agency for Development in Special Needs Education, 2012). In other words, a strong element in this approach involves, as interpreted by many schools, more freedom for students, and a greater degree of self-direction. This could be problematic for students with disabilities, according to the above findings.

Respondents were clear about their perceived ability to teach students with disabilities: it doesn't matter who does the teaching, but the general education teachers need extra training to perform their tasks well. When asked about their efficacy, respondents were confident about their own skills regarding the use of inclusive instructions. They scored even higher on their perceived possible cooperation with others, suggesting that respondents feel supported by colleagues
and not isolated in their task. Respondents were still confident, but a little bit less so, on their competencies regarding the managing of deviant behaviour within the group.

Most respondents were trained for working with students with disabilities on the job, and less than a third had had specialist training. About half of the respondents did not mention having received any training at all. Respondents clearly expressed their wish for more training, but also for a change of attitude within the school (minimising distrust and improving communication).

Overall, it can be concluded that students with disabilities do not receive much attention in literature, in teacher training and even in registration. There seems to be some 'invisibility effect' in regard to this group. Respondents who do work with students with disabilities, however, are quite positive about this work, and confident about their own capacities to perform in this sphere. They consider it positive for the students with disabilities and the group as a whole to learn from each other.

This 'invisibility effect' can lead to a number of issues: not much is known about students with disabilities in VET, leading this group to be subject to wariness and a possibly financially motivated - 'risk management' approach from schools. Indeed, both literature and survey results show that schools' unfamiliarity with these students and how to best serve them leads to the fact that teachers in general do not seem well prepared to work with students with disabilities. However, those who do work with these students grow to feel competent by virtue of experience.

### 4.2 Changes in 2014

This study describes the situation up until 2014. On 1 August 2014 the government introduces a new system, passend onderwijs ${ }^{39}$ (translated as 'appropriate' or 'inclusive' education).

With the introduction of passend onderwijs, the nationwide assessment system of student-allocated budgets (LGF) will be abolished. From then on, VET institutions will be responsible for the organization and shaping of their own support. They will assess the extra support and guidance needed by students with a disability or chronic illness, and determine how this support is given. It is also intended that the institutions offer additional guidance and support to all students who need extra support or guidance (not just the 'indicated' students).

The current funding and resources will be redistributed to achieve these goals. These changes call for a different way of thinking and working. The central question is: what does the student need in order to successfully follow his MBO study and complete with a diploma?

In practice, this will mean that Clusters 3 and 4 will no longer exist as such, including the assessments and extramural support. Only students in Clusters 1 and 2, and those with forms of epilepsy, will receive a form of individual-bound financing and ambulant support.

### 4.3 Further steps and recommendations

The imminent administrative changes in the sector, detailed above, will decentralize responsibility for budgetary distribution, and thus the provision of SEN resources and aids to students with disabilities, to the individual VET institutions across the

[^24]Netherlands. In that light, the findings of this report indicate various areas in need of significant attention.

In planning VET programmes for people with disabilities, the following critical issues need to be addressed:

- Catchment: can all people with disabilities be reached by (community-based) vocational skills training?
- Relevance: does the training reflect labour market needs, and does it lead to employment?
- Standards: are the training standards acceptable?
- Institutional capacity: are community-based vocational training institutions equipped to provide services to people with disabilities?
- Human capacity: does the staff of community-based vocational skills training institutions possess the knowledge, skills, and attitudes necessary to provide services to people with disabilities?

Currently, the educational success of students with disabilities in VET is influenced to a great degree by the commitment and attitude of their teachers and other support staff. This report has also established that these professionals tend to feel that their training for these responsibilities is insufficient (or indeed non-existent). Improvements to (the possibilities of) staff training would appear to be key in:

- strengthening the competencies of staff in dealing with students with disabilities, and;
- improving internal communication and lessening the apprehension towards working with students with disabilities evidenced in experienced staff.

Additionally, more research is required into the possible relationship between financial stimuli/policy measures and the position and intake of students with disabilities in Dutch VET.

## Sources

Antonak and Larrivee (1995) Psychometric analysis and revision of the Opinions Relative to Mainstreaming scale. Exceptional Children, 62(2), 139-149.

AOB, CNV, CMHF. (2008, feb 15). Notitie gezamelijke vakorganisaties Passend Onderwijs. Utrecht, Netherlands.

Australian Bureau Statistics. (2009). Disability, Vocation and Education Training, 2009. Retrieved 2013 from
http://www.abs.gov.au/ausstats/abs@.nsf/Products/4438.0~2009~Main+F eatures~People+aged+15\%E2\%80\%9324+years?OpenDocument

Bagshaw, M., \& Fowler, C. (2008). National Vet Disability Advisory Taskforce. Adelaide: NVDAT.

Bengtsson, S. (2010). Academic Network of European Disability experts (ANED) Country Report Denmark. Leeds: University of Leeds.

BIBB. (2006). The Promotion Of Vocational Education and Training of Persons with Disabilities in Germany. Bonn: BIBB.

BIBB. (2012). VET Data Report Germany 2011. Bonn: BIBB.

Breetvelt, I., Limburg, H., van Boonstra, M., \& Peetsma, T. (2010). Oorzaken toename geïndiceerde leerlingen cluster 1. Amsterdam: Kohnstamminstituut.

Centraal Bureau Statistiek. (2012). http://statline.cbs.nl/. Retrieved January 29, 2013 from cbs: http://statline.cbs.nl/StatWeb/publication/?VW=T\&DM=SLNL\&PA=37296n ed\&D1=a\&D2=0,10,20,30,40,50,(I-1)-I\&HD=130128-1044\&HDR=G1\&STB=T

Danish Disability Council. (2002). Danish Disability Policy. Copenhagen: Danish Disability Council.
de Klerk, M., Henk Fernee, Woittiez, I., \& Ras, M. (2012). Factsheet mensen met lichamelijke en verstandelijke beperkingen. Den Haag: Sociaal Cultureel Planbureau.

Den Hartog, C., Hollander, F., Plagman, E., \& Siewers, J. (2011). DELTION studenten met leerlinggebonden financiering. Zwolle: Deltion College.

Downing, J. E. (1996). Including students with severe and multiple disabilities in typical classrooms: Practical strategies for teachers. Baltimore: Paul H. Brookes Publishing Co.

Dutch Government. (n.d.). Wet gelijke behandeling op grond van handicap of chronische ziekte. Retrieved Feb 2013 from http://wetten.overheid.nl/BWBR0014915/geldigheidsdatum_28-02-2013

Ebershold, S., Schmidt, M., \& Priestly, M. (2011). Inclusive Education For Young Disabled People In Europe: Trends, Issues and Challenges. Leeds: University of Leeds.

EquaVet. (2012). European Quality Assurance. Retrieved 2012 from Implementing the framework: http://www.eqavet.eu/gns/what-we-do/implementing-theframework/

European Agency for Development in Special Needs Education. (2012). Vocational Education and Training. Policy and practice in the field of special needs education. Odense: European Agency for Development in Special Needs Education.

European Agency for Developmeny in Special Needs Education. (2011). Mapping the Implementation of Policy for Inclusive Education (MIPIE). Odense: European Agency for Developmeny in Special Needs Education.

Glaudé, M., \& van Eck, E. (2011). Lesgeven aan leerlingen op mbo-niveau 1 en 2. Amsterdam: Kohnstamm Instituut.

Groeneberg, R. (2012). Docenten niveau 1 en 2; een vak apart. Utrecht: Expertisecentrum Beroepsonderwijs.

Hippach-Schneider, U., Krause, M., \& Woll, C. (2007). Vocational Education and Training in Germany. Luxembourg: Cedefop.

ILO. (2003). Training Policies for Vulnerable Groups in Central and Eastern European Countries. Trade Union Seminar Report. Geneva: ILO.

ILO. (2004). Human Resources Development Recommendation (No. 195).
ILO. (2008). Recognizing Ability. The skills and productivity of persons with disabilities. Geneva: ILO.

ILO (2010, November). A Skilled Workforce for Strong, Sustainable and Balanced Growth. A G20 Training Strategy. Geneva:ILO.

ILO. (2011, July 7). Report IASG Thematic Seminar Moving from Segregated to Inclusive Services in Vocational Education and Training - European and North American experience. Geneva: ILO.

Jahnukainen M, Korhonen A. (2003). Integration of students with severe and profound intellectual disabilities into the comprehensive school system: Teachers' perceptions of the education reform in Finland. International Journal of Disability, Development and Education 50(2):169-180.

JOB monitor. (2012). From http://www.job-monitor2012.nl/

Marzano, R. (2007). Wat werkt op school. Research in actie. Meta analyse van 35 jaar onderwijsresearch. Middelburg: Bazalt.

MBO-raad. (2010). Vierde Benchmark MBO. MBO Raad.

McDaniel, O., Neeleman, A., Schmidt, G., \& Schmaling, H. (2009). De professionaliteit van MBO docenten in vergelijkend perspectief. Gids voor Beroepsonderwijs en Volwasseneneducatie , C-1-2-1 t/m C-2-73.

Miller, C., \& Nguyen, N. (2008). Who's supporting us? TAFE staff perspectives on supporting students with mental illnesses. Adelaide: NCVER.

Minister LNV; Ministry of Education, Culture and Science (OCW). (2005, Augustus). Besluit 460. Besluit bekwaamheidseisen onderwijspersoneel . Den Haag: Staatsblad van het Koninkrijk der Nederlanden.

Ministery of Education Culture and Science. (2011, 01 31). Naar Passend Onderwijs . The Hague: Ministerie van OCW.

Ministry of Education Culture and Science. (2009, October 5). Regeling visueel gehandicapte leerlingen WVO en deelnemers WEB 2010-2012. The Hague: Staatsblad.

Ministry of Justice. (2003, April 3). Wet gelijke behandeling op grond van handicap of chronische ziekte. The Hague: Staatsblad.

NCVER. (2012). Australian Vocational Education and Training Statistics: students with dissabilities 2011 . Adelaide, Australia: NCVER.

NCVER. (2007). Australia Vocational Education and Training statistics, students and courses 2006. Adelaide: NCVER.

Nederlands Jeugd Instituut. (2012). Factsheet Leerlingenzorg en ZAT's in het VO en MBO. Monitor 2011. Utrecht: NJI.

Niehaus, M., \& Kaul, T. (2012). Zugangswege junger Menschen mit Behinderung in
OECD. (2012). Child well-being Module.
www.oecd.org/els/social/family/database/CWBM . OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs.

OECD. (2008). Education At A Glance. . Paris: OECD.

OECD. (2009). Sickness, Disability and work; keeping in track in the economic downturn. background paper (pp. 1-44). Stockholm: OECD.

Onderwijscooperatie. (n.d.). Bekwaamheidseisen VO en BVE. Retrieved december 2012 from Onderwijscooperatie:
http://www.onderwijscooperatie.nl/?nl/onderwijscooperatie/bekwaamhei d/\&art=45

Productivity Commission. (2011). Vocational Education and Training Workforce, Research report. Canberra: Commonwealth of Australia.
rijksoverheid. (2013). From wat is leerlinggebonden financiering rugzak: http://www.rijksoverheid.nl/onderwerpen/beroepsonderwijs/vraag-en-antwoord/wat-is-leerlinggebonden-financiering-rugzak.html
rijksoverheid. (2013). mbo voor studenten met een handicap. From www.rijksoverheid.nl:
http://www.rijksoverheid.nl/onderwerpen/beroepsonderwijs/mbo/mbo-voor-studenten-met-handicap-of-stoornis

Salend, S. J. (2001). Creating Inclusive Classrooms: Effective and reflective practices ( $4^{\text {th }}$ ed.).Upper Saddler River, NJ: Merrill Prentice Hall.

Schuman, H. (2011). Education in the Netherlands, recent developments and the debate on integration. International Council for the Education of the Visually Impaired , 10-13.

Sharma, U.; Loreman, T.; Forlin, C. 2012. Measuring Teacher Efficacy to Implement Inclusive Practices: An International Validation. Journal of Research in Special Educational Needs, 12(1): 12-21.

Smit, J. (2010). Academic Network of European Disability experts (ANED) Country Report The Netherlands. Leeds: University of Leeds.

Start Foundation. 2013. Rapport meldpunt AUTI-weigerscholen. Eindhoven.
Stichting Beroepsonderwijs \& Bedrijfsleven. (n.d.). Toetsingskader kwalificatiestructuur.

The Netherlands Institute for Human Rights. (2013). dossier onderwijs. Retrieved 2013 from http://www.mensenrechten.nl/dossier/het-onderwijs

Thijs, A., van Leeuwen, B., \& Zandbergen, M. (2009). Inclusive Education in The Netherlands. Enschede: SLO National Institute for Curriculum Development.

Tines, J., \& Buzducea, D. (2009). Transitions Towards an Inclusive Future. Washington DC: USAID.

Tudjman, T., Gravesteijn, J., Tanis., O., \& de Vos, W. (2009). Wet Gelijke Behandeling op grond van Handicap of Chronische Ziekte in het mbo: Een verkennende studie naar de financiële belasting voor mbo-instellingen bij het uitvoeren van de WGBHC. Rotterdam: SEOR.

United Nations. (n.d.). Disabilities. Retrieved 2013 from UN Enable. Delevopment and human right for all: http://www.un.org/disabilities/default.asp?id=26
van der Meijden, A., van den Berg, J., \& Róman, A. (2012). Resultaten van opleidingen in het middelbaar beroepsonderwijs. Utrecht: Expertisecentrum Beroepsonderwijs.

Visser, K., Westerhuis, A., \& Hövels, B. (2010). De positie van het middelbaar beroepsonderwijs in het buitenland. Utrecht: Expertisecentrum Beroepsonderwijs.

Waldschmidt, A., \& Meijnert, S. (2010). Academic Network of European Disability experts (ANED) Country Report Germany. Leeds: University of Leeds.

Woittiez, I., Ras, M., \& Oudijk, D. (2012). IQ met beperkingen; De mate van verstandelijke handicap van zorgvragers in kaart gebracht. The Hague: Sociaal en Cultureel Planbureau.

World Health Organisation. (2012, 11 30). Disabilities. Retrieved 11 30, 2012 from Health Topics: http://www.who.int/topics/disabilities/en/

## Other sources:

> Personal consultation/interviews:
> Teacher training institute (www.seminarium.hu.nl; B. Groeneweg)
> Three experts, interviewed in 2011 on the position of students with disabilities in Dutch VET (ROC Friese Poort - C.v. Waveren; ROC RijnIJssel - K. de Jong; Cinop - M. Kemper)
> Platform gehandicapten $\mathrm{MBO}^{40}$ (MBO Raad ${ }^{41}$; M. Weemaes)

Bibliographical databases:
Database of ecbo including 35,000 records on VET and lifelong learning.
Database of VET-BIB (Cedefop), and Cedefop's library experts for additional sources ${ }^{42}$

Consultation of Danish and German experts from ReferNet ${ }^{43}$ for advice on information sources in their country, and desk research for information on Australia:

Denmark: Simon Rolls (SIRO@dpu.dk) http://edu.au.dk/en/
Germany: Martina Krause (krause@bibb.de) www.bibb.de www.refernet.de
Australia: NCVER.edu.au VOCED database: http://www.voced.edu.au/

Literature, policy and practice examples and documents:
Desk research

[^25]
## Appendix 1: Survey instruments used

## Opinions Relative to Integration of Students with Disabilities (ORI)

1 - I disagree very much 2 - I disagree pretty much 3 - I disagree a little 4 - I agree a little 5 - I agree pretty much 6 - I agree very much

Most students with a disability will make an adequate attempt to complete their assignments.

Integration of students with disabilities will necessitate extensive retraining of general classroom teachers.

Integration offers mixed group interaction that will foster understanding and acceptances of differences among students.

It is likely that the student with a disability will exhibit behavioural problems in a general classroom.

Students with disabilities can be best served in general classrooms.
The extra attention students with disabilities require will be to the detriment of the other students.

The challenge of being in a general classroom will promote the academic growth of a student with a disability.

Integration of students with disabilities will require significant changes in general classroom procedures.

Increased freedom in the general classroom creates too much confusion for the student with a disability.

General-classroom teachers have the abilities necessary to work with students with disabilities.

The presence of students with disabilities will not promote the acceptance of differences on the part of students without disabilities

The behaviour of students with disabilities will set a bad example for students without disabilities.

The student with a disability will probably develop academic skills more rapidly in a general classroom than in a special classroom.

Integration of the student with a disability will not promote the academic growth of the student with a disability.

It is not more difficult to maintain order in a general classroom that contains a student with disabilities than in one that does not contain a student with a disability.

Students with a disability will exhibit behavioural problems in a general classroom.
The integration of students with disabilities can be beneficial for students without disabilities.

Students with disabilities are likely to create confusion in the general classroom.

General-education teachers have sufficient training to teach students with disabilities.

Integration will likely have a negative effect on the emotional development of the student with a disability.

Students with disabilities should be given every opportunity to function in the general classroom where possible.

The classroom behaviour of the student with a disability generally does not require more patience from the teacher than does the classroom behaviour of students without a disability.

Teaching students with disabilities is better done by specialist rather than general classroom teachers.

Isolation in a special classroom has beneficial effects on the social and emotional development of a student with a disability.

The student with a disability will not be socially isolated in the general classroom.

## Teacher Efficacy for Inclusive Practices (TEIP) Scale

SD (1) Strongly Disagree; D (2) Disagree; DS (3) Disagree Somewhat; AS (4) Agree Somewhat; A (5) Agree; SA (6) Strongly Agree

I can make my expectations clear about student behaviour.
I am able to calm a student who is disruptive/noisy.
I can make parents feel comfortable coming to school.
I can assist families in helping their children do well in school.
I can accurately gauge student comprehension of what I have taught.
I can provide appropriate challenges for very capable students.
I am confident in my ability to prevent disruptive behaviour in the classroom before it occurs.

I can control disruptive behaviour in the classroom.
I am confident in my ability to involve parents of children with disabilities in school activities.

I am confident in designing learning tasks so that the individual needs of students with disabilities are accommodated.

I am able to get children to follow classroom rules.
I can collaborate with other professionals (e.g. itinerant teachers/speech pathologists) in designing educational plans for students with disabilities.

I am able to work jointly with other professionals and staff (e.g. aides, other teachers) to teach students with disabilities in the classroom.

I am confident in my ability to get students to work together in pairs/in small groups.
I can use a variety of assessment strategies (e.g. portfolio assessment, modified tests, performance-based assessment, etc.).

I am confident in informing others who know little about laws and policies related to the inclusion of students with disabilities.

I am confident when dealing with students who are physically aggressive.
I am able to provide an alternate explanation/example when students are confused.

## Questions about preparation

How are you as a teacher prepared for working with students with disabilities?

- During the teacher training
- Special training
- On the job
- By colleagues
- Via information on the internet
- Via external specialist(s)

In your eyes, is this preparation sufficient?

How can this preparation be improved? (Open question)

How can the preparation of trainers in apprenticeship situations be improved? (Open question)

## Questions about the interviewee

Role or function;
Sex and age;
Experience working in VET (in years);
Experience working with students with disabilities (in years);
Number of students with disabilities in your VET institution (current);
Type and severity of disabilities;
Are students with disabilities registered as such (i.e. for financial purposes)?


[^0]:    ${ }^{1}$ The researchers also note: "Statistics on the extent of this group are difficult to find - employment statistics do not document the health status of young people, while health or disability statistics do not easily yield information on the employment status of young people".

[^1]:    ${ }^{2}$ The ICF was officially endorsed by all 191 WHO member states in the Fifty-fourth World Health Assembly on 22 May 2001 (Resolution WHA 54.21).
    ${ }^{3}$ In November 2011 there were 2,791,453 children in the age group 6-19 in the Netherlands (www.cbs.nl).

[^2]:    ${ }^{4}$ SCP is a government agency which conducts research into the social aspects of all areas of government policy.
    ${ }^{5}$ This was done for the IASG thematic seminar "Moving from Segregated to Inclusive Services in Vocational Education and Training - European and North American Experience". The objectives of this seminar were: to examine the emphasis on inclusive vocational and training in the international policy agenda; to review successes and challenges in implementing this policy approach, with some concrete examples; to examine practical strategies to facilitate inclusion, and; to review steps that can be taken to tackle the challenges faced (ILO, 2011).

[^3]:    ${ }^{6}$ Platform gehandicapten MBO
    ${ }^{7}$ Cedefop is the European centre for the development of vocational training. http://www.cedefop.europa.eu/EN/Information-services/VET-bib-bibliographic-database.aspx; http://www.cedefop.europa.eu/EN/Information-services/ask-a-VET-expert.aspx
    ${ }^{8}$ ReferNet is a network created by Cedefop in 2002 to provide information on national vocational education and training systems and policies in member states, Iceland and Norway.

[^4]:    ${ }^{9}$ However, children with no diploma are also admitted at Level 1.
    ${ }^{10}$ Equivalent schools in the agricultural sector are called AOCs. Publicly funded ROCs, AOCs and trade training centres together offer vocational education to some 539,500 students (www.mboraad.nl.).

[^5]:    ${ }^{11}$ Naturally, students and school are all subject to international law: the Universal Declaration of Human Rights (Art. 2, 7); the International Covenant on Civil and Political Rights (ICCPR, art 2, 26); the International Covenant on Economic, Social and Cultural Rights (ICESCR, art 2, 2); the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, whole); the Universal Declaration of Human Rights (UDHR, Art.14); the European Charter of Fundamental Rights (ECFR, art. 21, 26)

[^6]:    12 The Start Foundation is an established venture philanthropy fund (founded in 1998) that makes both grants and social investments. The founders represented employers, trade unions and national government.
    ${ }^{13} \mathrm{http}: / / \mathrm{www}$. startfoundation.nl/autisme
    ${ }^{14}$ In Dutch: "Het verbod van onderscheid houdt mede in dat degene, tot wie dit verbod zich richt, gehouden is naar gelang de behoefte doeltreffende aanpassingen te verrichten, tenzij deze voor hem een onevenredige belasting vormen".

[^7]:    ${ }^{15}$ In practice, it is only when there is an appeal that a decision is made on what constitutes a 'disproportionate burden'. In addition to financial considerations, other factors needs to be taken into account - such as the practical implications, effects on the overall training process and the number of students with disabilities.

[^8]:    ${ }^{16}$ A so-called 'PGB' or 'personal bound budget'.
    ${ }^{17}$ http://www.cg-raad.nl/wij werken aan/onderwijs/zorg in de klas/index.php

[^9]:    ${ }^{18}$ www.deltion.nl
    ${ }^{19}$ All students, with or without disabilities

[^10]:    ${ }^{20}$ www.job-site.nl
    ${ }^{21}$ Not including Cluster 4 (behavioural and psychiatric problems)

[^11]:    ${ }^{22}$ Interpersonal; pedagogical; didactical; organising; cooperating internal and external; reflection and development.
    ${ }^{23}$ However, critics of the "BIO Act" mention that it is not functional, since there are no consequences when teachers do not meet the requirements.

[^12]:    ${ }^{24} \mathrm{http}$ ://eng.uvm.dk/Education/Upper-Secondary-Education/Vocational-Education-and-Training-(vet)

[^13]:    ${ }^{25} \mathrm{https}: / /$ www.retsinformation.dk/Forms/R0710.aspx?id=25295

[^14]:    ${ }^{26}$ Additional information from the Danish National Overview 2010: www.european-agency.org/countryinformation
    ${ }^{27} \mathrm{http}: / /$ www.eng.uvm.dk/Fact-Sheets/Upper-secondary-education/Basic-vocational-education-and-training(egu)

[^15]:    ${ }^{28}$ Baden-Württemberg, Bayern (Bavaria), Berlin, Brandenburg, Bremen, Hamburg, Hessen, MecklenburgVorpommern, Niedersachsen, Nordrhein-Westfalen (North Rhine-Westphalia - NRW), Rheinland-Pfalz, Saarland, Sachsen, Sachsen-Anhalt, Schleswig-Holstein and Thüringen.

[^16]:    ${ }^{29}$ The legal definition has to be so wide because of the different situations and laws in the Länder. Source: KMK - Kultusministerkonferenz

[^17]:    ${ }^{30}$ Dutch VET is divided into four levels, 1 being the most basic training for assistants, 4 being the highest, training for specialists.
    ${ }^{31}$ In February 2011 the Minister of Education, Culture and Science presented the overall policy paper
    "Actieplan MBO Focus op Vakmanschap 2011-2015". The outline of new policies re VET were explained in this document. The minister created a 'programme management MBO15' to support schools in implementing the new policies.
    ${ }^{32}$ The 'Randstad' is a conurbation in the Netherlands. It consists of the four largest Dutch cities (Amsterdam, Rotterdam, The Hague and Utrecht), and the surrounding areas. With a population of $7,100,000$, it is one of the largest conurbations in Europe.
    ${ }^{33}$ Given that this was an exploratory he 'extremes' (large and small) were taken to see if there was a relationship between size and answers.

[^18]:    ${ }^{34}$ Differences were not significant

[^19]:    ${ }^{35}$ ANOVA

[^20]:    ${ }^{36}$ ANOVA

[^21]:    1 Completely disagree - 2 disagree - 3 agree - 4 completely agree.

[^22]:    ${ }^{37} 20$ respondents $-42 \%$ of those surveyed answered this open-ended question

[^23]:    ${ }^{38}$ As of 2014, the government introduces a lump sum financing system - no longer individually based.

[^24]:    ${ }^{39}$ www.passendonderwijs.nl

[^25]:    ${ }^{40} \mathrm{MBO}=$ Middelbaar Beroeps Onderwijs $=$ secondary VET.
    ${ }^{41}$ MBO Raad = VET council, a national body.
     http://www.cedefop.europa.eu/EN/Information-services/ask-a-VET-expert.aspx
    ${ }^{43}$ ReferNet is a network created by Cedefop in 2002 to provide information on national vocational education and training systems and policies in member states, Iceland and Norway. Cedefop is the European centre for the development of vocational training.

