



International
Labour
Office
Geneva

Working Paper No. **307**

Business and initial vocational education and training in the Netherlands: A schematic overview

Gijsbert van Liemt

Sectoral
Policies
Department

**SKILLS AND EMPLOYABILITY BRANCH
SECTORAL POLICIES DEPARTMENT**

Working paper

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**International Labour Office
Geneva
2014**

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First published 2014

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van Liemt, Gijsbert.

Business and initial vocational education and training in the Netherlands: A schematic overview/ Gijsbert van Liemt, International Labour Office, Skills and Employability Branch, Sectoral Policies Department. Geneva: ILO, 2014

ISBN 978-92-2-128580-9 (web pdf)

International Labour Organization.

vocational education / vocational training / continuing vocational training / teaching personnel / working conditions / training centre / enterprise level / Netherlands

06.04

ILO Cataloguing in Publication Data

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Printed by the International Labour Office, Geneva, Switzerland

Acknowledgements

The author is grateful to Michael Axmann, Carin Håkansta, Aart Jaeger, Marc van der Meer, Peter Pennartz, William Ratteree and Anneke Westerhuis for their comments on an earlier version of this report. However, all remaining errors and views expressed are the exclusive responsibility of the author.

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Foreword

This is one of two research studies prepared for the ILO in 2013 on sectoral strategies for skills development. In 2010, the ILO held a Global Dialogue Forum on Vocational Education and Training as well as a Global Dialogue Forum on Strategies for Sectoral Training and Employment Security. These tripartite meetings of representatives of governments, trade unions and employers' associations concluded that sectoral approaches to skill development, if they are to be effective, should be part of long-term national growth strategies, enabling coherence to be built between skill development and labour market policies, and policies for technological innovation, service delivery, trade and investment. There was broad consensus among the participants that developing countries face an array of challenges that require implementation of a strong, sector-led approach to skills development. The forums called for policies and practices that result in a higher status for technical and vocational education and training as a means of meeting the challenges of the continued economic and jobs crisis and of preparing young people and enterprises for productive work in the future.

This paper was written by Gijsbert van Liemt, an independent consultant on employment and skills policies, and a former ILO official working on Active Labour Market Policies. His paper discusses secondary technical and vocational education and training (TVET) in the Netherlands, highlighting the role of TVET in regional training centres which offer a broad range of programmes at different levels.

It identifies reasons why Dutch TVET has received international attention, and examines the role of the social partners in this system, as well as the initiatives by the Ministry of Education, Culture and Science to change the framework over recent years. It provides a brief overview of the Dutch labour market and labour relations and of the main sources of labour market information, before discussing the role of business in secondary TVET, its place in the overall education system, government policies and related issues. It also covers the salaries, working conditions and job satisfaction of teachers and trainers.

The study underlines the importance of social partner involvement in the elaboration of sectoral skills strategies and ever evolving changes in skill needs. It also emphasizes the importance of sound recruitment practices, training strategies, and decent working conditions for TVET personnel. TVET strategies and systems are critically important components of comprehensive approaches to promote youth employability and ensure that training matches current demand in labour markets as well as future needs of developing sectors. It is hoped that the experience of the Netherlands can provide useful insights for policymakers and social partners in developing such strategies in their own countries.

We would like to thank Christine Evans-Klock and Michael Axmann in the Skills and Employability Branch and Oliver Liang in the Sectoral Policies Department for their coordinated efforts to produce this study on sectoral skills approaches in the Netherlands and the companion study on sectoral skills approaches in India.

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Contents

Acknowledgements.....	iii
Foreword.....	v
Acronyms and abbreviations.....	ix
Summary.....	xi
Introduction.....	1
1. Background and context.....	3
1.1. State of the labour market in brief.....	3
1.2. Labour relations.....	4
2. Labour market information.....	7
2.1. Research Centre for Education and the Labour Market.....	7
2.2. Other sources of labour market information.....	9
2.3. Human resource planning and “top” sectors.....	10
3. Business and secondary vocational education and training (MBO).....	11
3.1. Wagner Commission.....	12
3.2. Training and development or sector funds.....	13
3.3. National centres of expertise on vocational education, training and the labour market (KBBs).....	14
3.3.1. Functions and tasks of KBBs.....	14
3.3.2. National Qualifications Framework.....	14
4. Dutch secondary vocational education and training (MBO) system.....	17
4.1. MBO in the Dutch education system.....	17
4.1.1. Background to secondary education.....	17
4.1.2. Preparatory secondary vocational education and training (VMBO).....	17
4.2. MBO institutions.....	18
4.3. Different levels of MBO.....	20
4.4. The Government and MBO.....	21
4.4.1. Government roles and policy shifts.....	21
4.4.2. Adult and Vocational Education Act (WEB), 1996.....	22
4.5. Regional training centres (ROCs).....	23
4.5.1. ROC students.....	24
4.5.2. The “R” in ROCs and macroefficiency.....	25
4.6. The school-based pathway (BOL) and dual pathway (BBL).....	25
5. Teaching and training staff.....	28

5.1. Salaries and working conditions.....	28
5.2. Teacher shortages?	31
5.3. Job satisfaction	31
6. Conclusion	33
References.....	37
Appendix I. MBO students by level (2010–11).....	41
Appendix II. People interviewed	43

Boxes

Box 2.1. Wagner Commission	7
Box 2.2. Findings of the 2011 Labour Market Monitor for the Metal Trades (Arbeidsmarktmonitor Metaalektro)	8
Box 2.3. Some findings of the latest COLO publications.....	9
Box 2.4. A cautious industrial policy: Stimulating “top” sectors	10
Box 3.1. Towards more women working in science, technology, engineering and mathematics	13
Box 4.1. Rotterdam Shipping and Transport College (STC).....	19
Box 4.2. Youth Organization for Vocational Education and Training (JOB).....	25
Box 6.1. Foundation for Cooperation on Vocational Education, Training and the Labour Market (SBB)	36

Figure

Figure 4.1. Overview of the Dutch education system.....	18
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Tables

Table 1.1. Netherlands and European Union 15/16: Some key labour market data (2010).....	4
Table 4.1. Four levels of Dutch MBO	20
Table 4.2. Netherlands: Key education data	21
Table 4.3. Students in MBO by pathway (2000–11)	26
Table 5.1. Salary mix: MBO teachers (% of teachers by salary scale, full-time equivalent) 2006–11	29
Table 5.2. Employment in MBO (excluding AOCs) and AOCs (2006–10), FTE.....	30

Acronyms and abbreviations

AOC	Agricultural training centre (<i>agrarisch opleidingscentrum</i>)
BBL	Apprenticeship training pathway (<i>beroepsbegeleidende leerweg</i>)
BOL	Vocational training pathway (<i>beroepsopleidende leerweg</i>)
COLO	Association of Centres of Expertise on Vocational Education, Training and the Labour Market (Vereniging Kenniscentra Beroepsonderwijs Bedrijfsleven)
GDP	gross domestic product
HAVO	Higher general secondary education (<i>hoger algemeen voortgezet onderwijs</i>)
HBO	Higher vocational education (<i>hoger beroepsonderwijs</i>)
JOB	Youth Organization for Vocational Education and Training (Jongeren Organisatie Beroepsonderwijs)
KBB	National centre of expertise on vocational education, training and the labour market (<i>kenniscentrum voor beroepsonderwijs en bedrijfsleven</i>)
MBO	Secondary vocational education and training (<i>middelbaar beroepsonderwijs</i>)
OECD	Organisation for Economic Co-operation and Development
ROC	Regional training centre (<i>regionale opleidingscentrum</i>)
SBB	Foundation for Cooperation on Vocational Education, Training and the Labour Market (Samenwerking Beroepsonderwijs Bedrijfsleven)
SVM	Sector restructuring and modernization of senior secondary vocational education and training (<i>sectorvorming en vernieuwing middelbaar beroepsonderwijs</i>)
UWV	Employee Insurance Implementing Agency (Uitvoering Werknemersverzekeringen)
VMBO	Preparatory secondary vocational education and training (<i>voorbereidend middelbaar beroepsonderwijs</i>)
VMBO-BL	VMBO, basic learning track (<i>beroepsgerichte leerweg</i>)
VMBO-GL	VMBO, combined learning track (<i>gemengde leerweg</i>)
VMBO-KL	VMBO, advanced vocational learning track (<i>kaderberoepsgerichte leerweg</i>)
VMBO-TL	VMBO, theoretical learning track (<i>theoretische leerweg</i>)
VWO	Pre-university education (<i>voorbereidend wetenschappelijk onderwijs</i>)
WEB	Adult and Vocational Education Act (Wet Educatie en Beroepsonderwijs)

Summary

With over 500,000 students and over 50,000 staff members, secondary vocational education and training (MBO in the Dutch abbreviation) is statistically the most important type of secondary education in the Netherlands. For demographic reasons the number of students will decline, which, together with the imminent retirement of the “baby boom” generation, may well lead to skilled worker shortages in certain sectors in the medium term.

Most MBO is provided by 42 large, publicly funded regional training centres (ROCs), which offer a broad range of multilevel education programmes for both initial and post-initial vocational education and training. Specialized vocational education is provided by the much smaller agricultural training centres and vocational institutes. MBO institutions enjoy a great deal of autonomy (including financial autonomy) in how they organize initial vocational education and training and in the programmes they offer. The Minister of Education, Culture and Science is ultimately responsible for the quality of publicly funded initial vocational education and training and sets the legal framework. The near-continuous adjustments that have been made to this framework are a source of frustration for teaching staff.

Dutch MBO offers two parallel pathways, one a more school-based pathway (BOL) and the other a more practical, apprenticeship-type pathway (BBL), to obtaining the same diploma. This enhances students’ options, in particular when economic growth is slow and the number of available apprenticeships is low.

The education sector and the social partners have been jointly responsible since 1987 for drawing up the National Qualifications Framework but they have disagreed for a long time on how best to match educational programmes and labour market needs. Unfortunately, the MBO’s public image became the unintentional victim of their disagreements. In early 2012 a new organization (the SBB) was established to serve as focal point for all contacts between the Minister and MBO; the SBB board has equal participation from education and business and signifies a new beginning. Both sides are keen, from now on, to discuss their differences of view in camera; present only common standpoints to the outside world; and so work in partnership towards a better MBO in the Netherlands.

Introduction

This report is about secondary vocational education and training in the Netherlands. This is called *middelbaar beroepsonderwijs* or MBO in Dutch, and that is the abbreviation that will be used throughout this report. More precisely, the report focuses on initial vocational education and training in regional training centres (*regionale opleidingscentra*, ROCs). These are large, multilocational, publicly funded vocational education and training institutions, which offer a broad range of programmes at different levels.

The report will discuss the reasons why Dutch MBO has received international attention. The education institutions enjoy great autonomy. The role of the Government is comparatively restrained. Drawing up the National Qualifications Framework is the joint responsibility of representatives of education, employers and workers. Education institutions offer the choice of two pathways that lead to the same diploma: a school-based vocational training pathway (*beroepsopleidende leerweg*, BOL) with at least 20 per cent of students' time in practical occupational training; and the dual block or day release pathway (*beroepsbegeleidende leerweg*, BBL) with apprenticeship training. The lowest level of MBO has no admission requirements and is thus accessible to all.

The report will also pay attention to two of MBO's weak points. First, the education institutions have taken a long time to come to terms with the fact that since 1987 the social partners have a formal role in MBO. For many years, much dialogue between education and business tended to take place indirectly via Parliament and the press, to the detriment of MBO's public image.

Second, and partly related to the first point, over the years the Ministry of Education, Culture and Science has taken a great number of initiatives to change the framework within which MBO operates. These were taken both in response to criticism and in order to cope with the changing expectations of how MBO should function, but they created a good deal of unrest among schools' management and teachers.

The world of vocational education is constantly changing. Given the complexity of the subject, the many interlinkages between the different actors involved, time and resource constraints, and the changes that have already been announced, this report can do no more than give a schematic overview of Dutch MBO and how it functions (for a graphic overview see figure 4.1). It does not pretend to give a complete picture.

The report is organized as follows. After two short chapters on the state of the Dutch labour market and labour relations (Chapter 1) and the main sources of labour market information (Chapter 2), Chapter 3 discusses the role of business in MBO, giving special attention to the National Qualifications Framework, for which the social partners have been formally co-responsible since 1987. Chapter 4 discusses several dimensions of MBO, such as its place in the overall education system, government policies, the different levels of MBO, the ROCs, and the two pathways (BBL and BOL) that lead to the same diploma. Chapter 5 deals with the teachers and trainers; it discusses, inter alia, their salaries, working conditions and job satisfaction. The conclusion (Chapter 6) highlights the recent measures taken by the Minister to enhance the quality of MBO, and the new-found determination among education, government and social partners to work together in harmony in the interest of a better MBO in the Netherlands.

1. Background and context

1.1. State of the labour market in brief

The Netherlands is one of the most densely populated countries in the world. However, population and economic activity are unevenly spread across the country. The western and middle parts of the country have above-average population density. This is also the area where most economic activity takes place.

The Netherlands has a fairly open economy with good infrastructure. The level of education is high and rising: the Government spends 6.6 per cent of gross domestic product (GDP) on education.¹ Unemployment is low by international standards. The population enjoys a high standard of living; social and intergenerational solidarity have led to this high standard of living being fairly evenly spread.

However, current slow economic growth and the effects of the recent financial and economic crises are leading to a downward adjustment of people's living standards. In the long term, the costs associated with the "greying" of the labour force and the population, low fertility rates, and the rising dependency ratio are having a similar effect. The "baby boom" is turning into a "pensioner's boom". By 2040, the labour force is expected to have shrunk by between 5 and 10 per cent. A growing proportion of this shrinking labour force will be active in medical, paramedical and care professions. Those 65 and older will make up 25 per cent of the population by 2040 (compared to 16 per cent today). Those over 80 years old will make up 10 per cent of the population by 2050 (against 4 per cent today) (Council for Work and Income, 2011).

Few new jobs are expected to be created in the immediate future, but the jobs vacated by those who are retiring will provide employment to many – although the picture differs by sector. The Research Centre for Education and the Labour Market (ROA, 2011) expects that nine out of every ten new job openings will be the result of "replacement demand". The greatest recruitment problems are expected for care, technical and industrial professions, and in education.

As is the case elsewhere, the slowdown of the economy has moved the debate on labour market flexibility higher up the political agenda, with proponents and opponents of greater labour market flexibility divided along the usual lines. Much of that debate focuses on worker protection against dismissal.

Yet in many ways the Netherlands already has a flexible labour market. Unemployment is low and the youth unemployment rate, although higher than average, is the lowest in the Organisation for Economic Co-operation and Development (OECD) area after Switzerland. A comparatively large proportion of the labour force is employed by private employment agencies.

The number of self-employed without employees (called *ZZP-ers* in Dutch) increased from 570,000 in 2001 to 717,000 in 2010, and this has been mentioned as one explanation for the Netherlands' relatively low level of unemployment. Those self-employed are also seen to be absorbing more than their fair share of the worsening labour market conditions.

¹ Source: Statistics Netherlands. Year 2010; up from 5.5 per cent of GDP in 2000.

The Netherlands is well known for its high share of part-time workers. Half of all jobs in the Netherlands are part-time jobs (table 1.1). Most part-timers are women but the number of men not working full time is increasing. Working part time enables people to combine work and care (for children and the elderly). Importantly, the level of social protection of those in part-time jobs is not fundamentally different from those in full-time jobs (ROA, 2011; Council for Work and Income, 2011). For instance, the rules governing paid holidays, parental leave, pensions and protection against dismissal apply to part-time as well as full-time workers.

Table 1.1. Netherlands and European Union 15/16: Some key labour market data (2010)

	Netherlands	European Union 15/16
Labour force participation rate (net, %)	74.7	65.4
Percentage in part-time jobs	48.9	20.5
Unemployment rate (%)	4.5	9.6
Long-term unemployment rate (%)	1.2	3.8

Source: Council for Work and Income, 2011.

1.2. Labour relations

In the Netherlands, there is nothing unusual about the social partners working together in areas of common interest. Their involvement is widely seen as contributing to economic and social stability:

Physical and social distances in the Netherlands are small. Top officials and their advisors in trade unions and employers associations meet frequently. They have easy access to cabinet Ministers, key policy makers and top civil servants. Various foundations, councils, boards and committees allow for frequent, protracted and multiple contacts (Visser and Hemerijck, 1997, p. 90).

Labour relations in the Netherlands are comparatively stable (but the country has seen and continues to see its share of industrial action). Employers' and workers' organizations are widely accepted and respected. Their representatives meet frequently at national and sector level. At national level, the central workers' and employers' organizations meet at the bipartite Labour Foundation (Stichting van de Arbeid, STAR). Together, the social partners meet with government to discuss both labour market and broader economic issues. Until 1995, the Government was obliged by law to consult the tripartite Social Economic Council (Sociaal Economische Raad) before introducing new legislation. The Social Economic Council is made up of employers' and workers' representatives, as well as independent members (such as the President of the Central Bank and university professors) appointed by the Government.

A typical feature of the Dutch model of consultation and consensus seeking (the "polder model") is the collective labour agreement (*collectieve arbeids overeenkomst*) and its mandatory extension beyond the original parties to the negotiation. Negotiations on the funding of training and development funds (*opleidings- en ontwikkelingsfondsen*), which finance staff training and retraining (see section 3.2), are part of sector-wide collective labour agreement negotiations. Employers who sign a contract with a trade

union are obliged by law to apply its conditions to all comparable employees, including those who are members of other unions.²

Mandatory extension of collective labour agreements is another typical feature of Dutch industrial relations. The 1937 Extension and Nullification of Collective Agreement Act allows the Minister of Social Affairs and Employment to declare a collective labour agreement binding upon non-organized employers, if the agreement covers a substantial majority of the industry's employees (Visser and Hemerijck, 1997); however, the Minister is not obliged to do so. Refusing to approve (parts of) the collective labour agreement constitutes an instrument available to the Minister to influence negotiations on such agreements (Delsen, 2000).

The downside of the Dutch polder model is that long negotiations and the search for consensus take up much time, inevitably lead to compromises, and do not offer many possibilities for the social partners to raise their profile among their members. This is particularly hard on the trade unions that have seen a steady decline in membership, and thus in the human and financial resources available for multilevel vocational education and training negotiations.

With regard to initial vocational education and training, there are no great differences of view between employers' and workers' organizations. Both want to educate and train young people for a good job. The trade unions emphasize that these young people must be well equipped for a long working *and* learning life, that is, they are employable long after they have left their initial education and training. To achieve their aims, employers' and workers' organizations work closely together at national and sector level (see Chapter 3).

² "Collective agreements have a legally binding status and usually contain a 'peace' or 'no-strike' clause. Since only those unions that sign are bound by a peace clause, employers are keen to involve all unions with significant membership. Unions prefer not to stand aside, because only signing unions gain the union representation rights established through collective bargaining and only they receive the annual employers' fee in compensation for the *erga omnes* application of agreements" (Visser and Hemerijck, 1997, p. 83). This fee is given in recognition of the fact that the trade unions negotiate in representation of the entire workforce and do not seek specific advantages exclusively for their membership.

2. Labour market information

A good system of labour market information is essential for the labour market to function well. It allows jobseekers and job-switchers to spend less time, money and energy finding the job that suits them; employers can avoid costly and time-consuming recruitment drives; and the Government saves on unemployment benefits. MBO programmes with poor labour market perspectives can be cancelled and students can train for other jobs instead.

However, it is not enough to collect, analyse and disseminate relevant information. Key challenges are to make the data available in a user-friendly way; to make sure that they reach the relevant target groups; and to ensure that these target groups actually consider the data and use them when making employment- and training-related decisions (Algemene Rekenkamer, 2008).

The Netherlands has seen a strong increase in labour market information in recent years (Folkeringa et al., 2012). Many sources now supply systematic information of relevance to the vocational education and training sector,³ but to what extent these sources are compatible is a moot point (Folkeringa et al., 2012). They use different definitions, cover different geographical regions, use different approaches, target different (partly overlapping) audiences and use different (partly overlapping) databases. Whether the increased volume of labour market information has led to more transparency is an open question (Folkeringa et al., 2012; Algemene Rekenkamer, 2008). Some of the main sources of labour market information of relevance to MBO are discussed below.

2.1. Research Centre for Education and the Labour Market

The Research Centre for Education and the Labour Market (Researchcentrum voor Onderwijs en Arbeidsmarkt) is part of Maastricht University. The influential Wagner Commission (box 2.1) highlighted the need for a better match between education and occupational practice because of the positive contribution this would make to economic development. In the wake of its recommendations, the Ministry of Education, Culture and Science decided to commission Maastricht University to undertake a long-term research assignment, the primary aim of which was to make the labour market more transparent for education decisions (Heijke, 2008). Like similar university institutes, today the Research Centre for Education and the Labour Market is in part funded by the central Government and in part by other sources.

Box 2.1. Wagner Commission

Following the second oil crisis, the Dutch economy was in bad shape. Economic growth had slowed, inflation was high and so was unemployment. The Government then set up a high-level tripartite commission – the Wagner Commission, named after its chair, former Royal Dutch/Shell president Gerald Wagner – to advise it on industrial policy and the revitalization of the Dutch economy. The commission recommended, inter alia, wage moderation, a reduction in the budget deficit, and a less direct and more facilitating role for the Government in the productive sector. It also recommended that the business world should be more closely involved in vocational education and training, in view of the latter's contribution to economic development (OECD, 1994; Heijke, 2008; Romijn, 1999). Broad agreement emerged from the public debate that followed the publication of the Wagner Report concerning the importance for the social partners to have a formal role in what was seen as a joint (government, education, business) responsibility (Hövels, Visser and Schuit, 2006).

³ For an overview, see Council for Work and Income, 2012.

Every two years the Research Centre for Education and the Labour Market publishes a report⁴ on the current and future labour market situation in the Netherlands. This report, entitled *The labour market by education and occupation until the year 20xx*, provides an overview of the medium-term labour market perspectives by type of education and by profession. The time horizon chosen is five years so as to provide those who are about to start their education with a good picture of their labour market situation at the time of graduation.

The report is aimed at policy-makers and education institutions, to help them decide whether or not to start new programmes or adjust existing ones; at the social partners, to make them aware of where future bottlenecks might emerge; and at private and public employment agencies. The report uses the outcome of periodic surveys undertaken by Statistics Netherlands (Centraal Bureau voor de Statistiek) as well as surveys that the Research Centre for Education and the Labour Market undertakes itself.⁵ The reports are co-financed by a number of agencies: the Ministry of Education, Culture and Science; the Ministry of Economic Affairs, Agriculture and Innovation; the Employee Insurance Implementing Agency (Uitvoering Werknemersverzekeringen, UWV); the Association of Centres of Expertise on Vocational Education, Training and the Labour Market (Vereniging Kenniscentra Beroepsonderwijs Bedrijfsleven, COLO); the Council for Work and Income (Raad voor Werk en Inkomen); and the (private) employment agency Randstad.

The Research Centre for Education and the Labour Market also publishes entirely privately funded, sector-specific reports such as the *Labour Market Monitor for the Metal Trades (Arbeidsmarktmonitor Metaalektro)*, funded by the metal trades sector. Box 2.2 presents some of the main findings of the 2011 *Monitor*.

Box 2.2. Findings of the 2011 Labour Market Monitor for the Metal Trades

(Arbeidsmarktmonitor Metaalektro)

The 2011 *Labour Market Monitor for the Metal Trades* found, inter alia, a growing demand for multi-skilled technicians capable of working on their own. To make high-quality products and respond adequately to the specific wishes of clients, employees need to have both good technical skills and good behavioural skills. The latter include the ability to solve problems; the ability to relate to clients and to cope with change; flexibility; and capacity to take initiatives. A significant number of firms expected their technicians to both take on broader responsibilities and further develop their technical competences.

The ageing labour force is a big problem in the metal trades sector. The average age of workers is 41.1 years and rising, as is the number of people due to retire soon. More and more firms foresee problems in replacing those retiring in view of the stagnating number of students opting for industry-relevant course programmes⁶ (see also boxes 2.3 and 3.1). Six out of every ten firms reported that they could not find recruits with the required competences. As a result they produced less than they should; delivered later than they agreed; and experienced rising work pressure. Despite the slowing overall economy, no fewer than 14 per cent of the firms surveyed had been forced to reduce production due to staff shortages (Van Breugel et al., 2011).

⁴ A biennial schedule was chosen because year on year the labour market perspectives of education programmes were not considered to change a great deal. The intermediate year was thus available for a critical evaluation of the previous forecasts (Heijke, 2008).

⁵ Such as the *BVE Monitor*, an annual survey conducted among school leavers from vocational education (BOL) and apprenticeship training (BBL) in secondary vocational education.

⁶ Preparatory secondary vocational education and training (VMBO) actually saw the number of pupils in technology-related subjects decline from 41,679 in 2005 to 29,827 in 2010 (Kenteq).

2.2. Other sources of labour market information

In addition to the Research Centre for Education and the Labour Market, a number of other institutions collect and disseminate labour market information. The widely used data of Statistics Netherlands and those of the Public Employment Service (UWV WERKbedrijf) cover all sectors nationwide. Others cover a specific group of firms, for example the Economic Institute for Small and Medium Enterprises (Economisch Instituut voor het Midden en Klein Bedrijf), or focus on one sector only, for example the Economic Institute for the Building Trades (Economisch Instituut voor het Bouwbedrijf), which surveys its members on actual and expected labour market developments in its sector.

The publicly funded, sector-wide centres of expertise on vocational education, training and the labour market (*kenniscentra voor beroepsopleiding en bedrijfsleven*, KBBs) (see Chapter 3) gather, publish and analyse data on sector labour markets by geographical region. KBBs regularly survey the companies that are active in their sector. KBBs also collect detailed information about the supply of and demand for vacancies for practical occupational training (*leerplaatsen*) by job category, education level (MBO levels 1 to 4) and subregion.

COLO (now SBB),⁷ the national association of KBBs, uses the information supplied by the 17 KBBs (and other sources such as Statistics Netherlands and UWV) to provide a cross-sectoral overview for the benefit of students attending MBO and those about to start. The association's *COLO Barometer* is published once every three months; it indicates how easy or difficult it is to obtain a placement for practical occupational training for each of 43 subsectors, six geographical regions,⁸ and level of education (MBO levels 1 to 4).

COLO's *Trendwatch Labour Market (Trendwatch Arbeidsmarkt)* is a more detailed and more sophisticated version of the *COLO Barometer*. Information on employment opportunities and openings for trainees is disseminated via such websites as <http://www.kansopwerk.nl> and <http://www.kansopstage.nl>. The former rates the likelihood of finding an MBO-level job for 50 occupations. The rating is given for all six labour market regions and uses a five-point scale ranging from good to poor. Box 2.3 presents some findings of the latest COLO publications.

Box 2.3. Some findings of the latest COLO publications

The latest COLO publications found that some sectors with a looming shortage of workers (for example the metal trades) do not attract enough new students because of a public image problem (little known; seen as hard or dirty work). Other sectors (fashion; animal husbandry) have the opposite problem: they are seen as attractive to work in but have few openings. Some sectors send out a mixed message: horticulture, pig breeding and poultry breeding have openings but also employ many foreigners.

In some sectors there is a shortage of vacancies for practical occupational training for those following MBO level 1 and 2 courses because firms prefer students following MBO level 3 and 4 programmes. In turn, those following MBO level 4 programmes compete for vacancies with higher vocational education (*hogere beroepsopleiding*, HBO) students.

Some occupations suffer from a structural decline in demand due to the Internet (for example travel agencies) or to automation (for example port workers). The volume of demand and the type of qualifications needed for new jobs, for example in multimedia, are notoriously hard to predict.

⁷ On 1 January 2012 COLO was renamed SBB (see Chapter 6).

⁸ For administrative purposes, the Netherlands is divided into 12 provinces. For labour market purposes, other territorial divisions are being used. COLO uses six regions (North, East, Midwest, Northwest, Southwest, and Southeast). UWV WERKbedrijf uses 30 regions.

2.3. Human resource planning and “top” sectors

As is the case in other countries, there is concern in the Netherlands about how future economic growth can be safeguarded so as to maintain current high employment levels and living standards. As a rule, the Netherlands does not engage in either economic or human resource planning. Past experience has shown that Governments that try and “pick winners” are rarely successful and that this can result in costly mistakes. The current Dutch Government has opted for a middle ground. It has identified a number of “top” economic sectors that will receive extra Government attention and priority funding but these nine sectors, “in need of reinforcement”, are broadly defined. They have been selected because historically they have been shown to be both innovative and internationally competitive (box 2.4). The Ministry of Economic Affairs, Agriculture and Innovation coordinates the promotion of the top sectors.

Box 2.4. A cautious industrial policy: Stimulating “top” sectors

The current Dutch Government wants to give special attention to nine “top” sectors that in the past have proven to be internationally competitive and are considered to have good growth prospects. The Government sees its role as a facilitating agent. It has instructed its embassies abroad to support Dutch companies’ foreign ventures, and it has promised to help business by eliminating rules and regulations and accelerating procedures. It also intends to improve the quality of education and training. Investments in research and development receive an extra fiscal stimulus. In all, the central Government has made available 1.5 billion euros, but leaves it to the sectors concerned to make proposals for spending, including through “innovation contracts”.

Improving the collaboration between business, education institutes and the Government (the “golden triangle”) is seen as the key to success. To this end, for each sector a four-person “top team” has been assembled, consisting of a representative of small and medium enterprises; an academic; a civil servant; and a figurehead (*boegbeeld*), usually a senior or recently retired executive of a large, internationally operating company.

The sectors that have been selected are the chemical industry; life sciences and health; the creative industries; energy; high technology; horticulture; food processing; logistics; and water management. Attracting company headquarters to the Netherlands was later added as a separate sector, as this is considered to favourably affect employment in research and development and in distributional activities (Source: Ministry of Economic Affairs, Agriculture and Innovation).

The implications of the selection of these top sectors for skills and training are to be considered at the sector level. Each top sector has been invited to prepare a “human capital agenda” outlining the human resource requirements for the long-term reinforcement of its international competitiveness. Key themes include lifelong learning, social innovation, demand-driven vocational training, close contacts between education and training institutions and the business world, and improving the attractiveness of technical training programmes, including by improving their public image and offering job guarantees to graduates from these programmes. No extra government resources are foreseen for financing the human capital agendas.

3. Business and secondary vocational education and training (MBO)

One would expect industry and the education community – the professionals engaged in the day-to-day running of education institutions and in the teaching and coaching of students – to work closely together in partnership. The business community (*het bedrijfsleven*),⁹ including firms and not-for-profit organizations, is both a future employer of secondary vocational education and training (MBO) graduates and a partner in education, as it provides students with essential practical training. In practice the relationship between industry and the education community has proven to be complex and far from smooth.

The two parties approach MBO from a different point of departure and with a different background, and this brings to light conflicting interests. Business wants to hire people with the “right” skills and competences and expects vocational education to deliver these. It stands ready to contribute and, indeed, it trains thousands of MBO students each year. Businesses think about the contents of vocational training in terms of the knowledge, skills, and attitudes that new recruits must have (Bronneman-Helmers, 2011). Their focus is on the jobs that need to be done and on the vacancies that need to be filled.

The education community’s focus is on the students. It thinks in terms of the needs, talents and preferences of the young people who start a vocational education (Bronneman-Helmers, 2011). While acknowledging that finding a job rather than obtaining a diploma should be the ultimate goal, the education community believes that students should be prepared for lifelong learning and be equipped for a working life that is likely to include further training or retraining as well as multiple employers. The challenge is to find a balance between these two views, these two cultures.

Over time, there has been considerable variation in the degree of closeness between MBO institutions and the business community. Historically, a vocational education and training school was small and set up by employers in a particular region to supply them with the necessary skilled workers, with minimal involvement of the State. Contacts between schools and business were close and students had no problem obtaining a place for practical occupational training.

In the 1960s the views of MBO changed. Schools became instruments for achieving greater social equality. Their contribution to students’ personal development became a key objective. General education subjects were added to the curricula. The State took over the financing of initial vocational education and training.

The business world, however, considered that the broadening of the curricula occurred at the expense of the acquisition of directly applicable skills. To its regret, it noted a widening gap between the world of work and that of vocational education.

The tide started to turn in the early 1980s. Following the second oil crisis of the late 1970s, the Netherlands economy was in crisis; unemployment reached record levels; and many felt that something had to be done (for a historic overview of the development of

⁹ The Dutch expression *het bedrijfsleven* is translated here to include industry, the business world or business community. In the context of this report, this covers also not-for-profit organizations and the Government, both important employers of MBO graduates in (for example) care and medical and paramedical professions.

vocational education and training in the Netherlands see, inter alia, OECD, 1994; Lenssen, 2011; Westerhuis, 2007; Moerkamp and Onstenk, 1999).

3.1. Wagner Commission

The report by the Wagner Commission (see box 2.1) and the public debate that followed its publication in 1981 are widely regarded as having acted as a catalyst for the changes that followed. The Wagner Commission's recommendations included strengthening the responsiveness of vocational education and training to the needs of the labour market, and an increased and more formal role for the social partners in vocational education and training. The report laid the basis for some major changes in the objectives of vocational education and training and how it is organized in the Netherlands (see Chapter 4). These changes should be seen in the context of a more general shift in government policies aimed at stimulating economic growth, reducing unemployment (above all youth unemployment), deregulation, and reducing the role of the central Government.

Since 1987, business (employers' and workers' organizations) has had a formal role in Dutch MBO. In that year the (predecessor to the) expertise centres (KBBs) (see section 3.3) were given the responsibility for drawing up the National Qualifications Framework. However, this new formal role for the social partners did not solve the controversy over who should ultimately determine the shape of MBO and why (Hövels, Visser and Schuit, 2006, p. 38). It coincided with the creation of ever-larger education institutions with greatly enhanced autonomy. The schools found this co-responsibility at odds with their new autonomy. It was only after both parties came to realize that MBO's public image was becoming the victim of their differences that they agreed to intensify their collaboration and work in partnership (see Chapter 6).

Firms and other organizations where students do their practical occupational training are a key source of initial vocational education and training funding (after the Government). This funding consists of the salary of the company trainers who coach the students; the costs of training the company trainers; and the costs of the company equipment and materials being used. In addition, BBL students (apprentices) are paid a salary. BOL students may get a small fee in addition to the firm paying their travel expenses.

In practice, contacts between business and MBO take place mainly at two levels: at the macro (national and sector) level, employers' and workers' representatives, together with those from education, are jointly responsible for drawing up the qualification files; at micro level, MBO institutions interact with the 218,950 work placement firms and institutions that make available work places for students' practical occupational training. These work placement firms and institutions feel that contacts with ROC teachers could be closer, and that education institutions should inform students better about the labour market perspectives of their educational programmes (Hövels et al., 2006; Algemene Rekenkamer, 2008).

This chapter will pay special attention to two dimensions of MBO–business relations: the training and development (or sector) funds that finance a large proportion of workers' training (in section 3.2); and the National Qualifications Framework (in subsection 3.3.2).

3.2. Training and development or sector funds

Training and development (or sector) funds aim to attract and keep well-trained staff in the sector concerned by offering good-quality jobs and by stimulating education and training, and by fostering good labour relations. Individual sector funds decide freely how to go about this in their sector. The funds are administered by the social partners and financed by the sector's employers, who pay a percentage of the total wage bill¹⁰ into the fund. This percentage varies by sector and is between 0.1 and 1.5 per cent (for instance, it is 0.6 per cent in the metal trades; 0.5 per cent for most of the automobile sector; and 1.5 per cent in the building sector). In 2007 there were 140 such funds covering 116 sectors. They covered at that time 86 per cent of the total number of employees¹¹ (Donker van Heel et al., 2008).

Sector funds make a contribution to firms in their sector for their costs of staff training. Since all firms contribute to the fund it is an important mechanism for evening out the costs and efforts of those firms that do and those that do not engage in training. Contributions *by* the fund lower the costs to firms and institutions that engage in training activities; (net) contributions *to* the fund raise the costs to those firms and organizations that do *not* offer training possibilities. In this way the funds combat free-rider behaviour.

Sectors faced with considerable replacement demand and declining numbers of new recruits (such as the metal trades) increasingly use their funds to attract people to their sector. They use their funds to improve the sector's public image, make it attractive to new recruits, and persuade students to opt for MBO (and VMBO) courses and programmes that are relevant to their sector. Some funds organize projects to persuade those who have left the sector to re-enter. The metal trades training and development fund has a project called "*Femme Metaal*" (which in the Dutch pronunciation rhymes with *femme fatale*) to attract more female students to technical professions (box 3.1).

Box 3.1. Towards more women working in science, technology, engineering and mathematics

Attracting more women is one way of coping with the looming shortage of workers in technology-related professions. A coalition of education institutions, employer organizations, relevant ministries and sector funds is undertaking initiatives at all levels to achieve this. People employed in technical occupations visit primary schools to tell pupils about the work they do. During the annual "Girlsday", girls in the 10–15 age group are invited to visit a steadily growing number of firms and education institutions to get acquainted with the latest technologies in the metal processing industry. Yearly "Mirror Image" (*Spiegelbeeld*) awards are given to women who have been particularly active in motivating young women to study science- and technology-related subjects. The metal processing training and development fund organizes the yearly *Femme Metaaldag* to showcase particularly successful women and to discuss the main obstacles facing women who want to work in the industry and how to overcome these. The *Prix de Femme Metaal*¹² is awarded to metal-processing firms or companies that have been particularly good at attracting and keeping women in technical and managerial jobs. The National Expertise Centre for Girls and Women in Science and Technology (Landelijk Expertise Bureau voor Meisjes en Vrouwen in Bèta en Techniek) encourages the participation of girls and women in science, technology, engineering and mathematics education (Sources: <http://www.vhto.nl>; <http://www.FemmeMetaal.nl>; <http://www.Spiegelbeeld.nl>; <http://www.Girlsday.nl>).

¹⁰ Subsidies from the Ministry of Social Affairs and Employment and the European Social Fund are other, but minor (and in the case of the European Social Fund, declining) sources of funding.

¹¹ This high percentage is partly explained by the fact that training and development funds are part of the collective labour agreements, which, as pointed out in Chapter 1, are often declared generally binding.

¹² The *Femme Metaaldag* is now called *Femme Techdag*; the *Prix de Femme Metaal* has been renamed *Femme Tech Award*.

In 2005, 81 per cent of all funds were found to have invested in retraining; 61 per cent in information activities; 55 per cent in research; 42 per cent in employment projects; 42 per cent in employability; 42 per cent in child care; 36 per cent in labour conditions; and 19 per cent in regular training activities (De Mooij en Houtkoop, 2005, in Van Lieshout and Scholing, 2009).

3.3. National centres of expertise on vocational education, training and the labour market (KBBs)

3.3.1. Functions and tasks of KBBs

The national centres of expertise on vocational education, training and the labour market (*kenniscentra beroepsonderwijs bedrijfsleven*, KBBs) are intermediary organizations active at the branch or sector level. They function as a bridge between the business world and vocational education, and between firms and schools. Their qualification files articulate the needs of the world of work. By ensuring sufficient work places (for practical occupational training) they provide a service to schools and students (Bronneman-Helmers, 2011). Each of the 17 KBBs has a board composed of representatives of workers' and employers' organizations (one third each) and of the education sector (also one third).

The Government funds the legal tasks¹³ of the KBBs, which are basically two. The first concerns the work placement firms and institutions (*leerbedrijven*; singular, *leerbedrijf*); the second concerns the National Qualifications Framework (see next subsection). Regarding the first task, KBBs must (a) make sure that there are sufficient, officially recognized work placement firms¹⁴; (b) formulate publicly the criteria that an officially recognized work placement firm must satisfy; (c) keep a public register of officially recognized work placement firms; (d) make sure that work placement firms continue to satisfy the official criteria.

3.3.2. National Qualifications Framework

The second legal task for the KBBs is to develop and keep up to date the National Qualifications Framework. The framework is the basis of the Dutch regulatory regime for adult and vocational education. It guarantees the involvement of the social partners in the development of the structure and the contents of vocational education.

Before 1987, business had no representation or responsibility in this process. Attainment targets were established by the Minister of Education, while curricula were

¹³ The law permits KBBs to offer other activities in addition to their legal, publicly funded tasks, provided that these are related and do not cause prejudice to the legal tasks. KBBs are active in labour market research (see Chapter 2); offer post-initial training courses and programmes (and so compete with the contract courses and programmes offered by the ROCs); and organize examinations and provide inputs for examinations. For most KBBs, the income earned through these privately funded activities exceeds that of the publicly funded activities (Bronneman-Helmers, 2011, p. 325).

¹⁴ For a work placement firm (*leerbedrijf*) to be officially recognized it must offer a safe environment and activities that are in line with the processes that are part of the student's future occupation; offer sufficient expert coaching that is focused on the interests of the student; be ready to consult with the student's education institution and the KBB; and agree to feature in a public register of work placement firms.

produced by designated committees of experts on education in particular subjects. In 1987, a sector consultative body for teachers and employers (*bedrijfstakgewijze overlegorgaan onderwijs bedrijfsleven*) was established for each business sector, with joint representation for education and business (Moerkamp and Onstenk, 1999, p. 40). These bodies were renamed Landelijk Orgaan Beroepsonderwijs (LOB) in 1993 and KBBs in 2002. With the establishment of the BOOB, for the first time an education law gave formal responsibilities to parties that were not part of the education system proper¹⁵ (Lenssen, 2011).

Today, the National Qualifications Framework is established as follows. First, the social partners develop occupational profiles that describe the core tasks, work processes and competencies of an experienced skilled professional. Next, with the support of KBB staff, representatives of the social partners and education develop qualifications that specify the requirements in terms of skills, competencies and attitudes that an MBO student must meet upon graduation. Altogether there were 612 different recognized qualifications in 2012.

Related, but different qualifications at the same or different levels of education are grouped into qualification files. For example, the qualification file “car technician” includes “car technician” (level 2), “senior car technician” (level 3) and “technical specialist” (level 4). Most qualification files have one or two qualifications, some have more, and a few have as many as 11 qualifications. There were 237 qualification files in 2012. Next, the qualifications are adopted by the Ministry of Education, Culture and Science. Finally, schools develop curricula on the basis of the qualification files (Visser, 2010, p. 43; SBB/COLO; BOVAG).

When preparing the qualification files, KBBs attempt to combine the advantages of two potentially contradictory needs (Van Lieshout et al., 2009, p. 23): on the one hand there is a need for diplomas and certificates that are valued by employers and employees, so as to facilitate labour market transactions and transitions; on the other hand there is a need for maximum space for those in charge of education and training (both the education institutes and the work placement firms) to attain high levels of effectiveness and efficiency by catering in optimal fashion for the preferences of both the student and the work placement firm or institution. Qualifications must thus be sufficiently recognizable yet not too detailed so as to leave the education institutions some margin for discretion (Van Lieshout and Scholing, 2009; OECD, 1994).

The education sector is reportedly not happy with the large number of qualifications (Bronneman-Helmers, 2011), which it considers complex (Commissie Oudeman, 2010) and detrimental to fruitful collaboration at the micro level between business and education (Schuit, Hövels and Kennis, 2009). Many in the sector experience the National Qualifications Framework as an externally imposed (quality) standard that does not leave enough room for their own pedagogical goals and complicates the flexibility of pathways (Lenssen, 2011).

Critics of the sector approach argue that the KBBs do not take sufficient account of sector-transcending developments and developments that take place at the fringes of sectors. This weakness is partly compensated by the fact that through mergers the

¹⁵ This was seen as a milestone by the social partners but the education institutions did not see it as an improvement. “The Government tried to reintroduce at macro level what had been lost at micro level.” This was to lead to “sometimes heated disputes between the MBO institutions and the social partners on the supremacy in the sector”, for example on how to match educational programmes and labour market needs (Lenssen, 2011, p. 230 – translated from the Dutch original by the author).

number of KBBs decreased from 31 to 17 between 1996 and 2009 (Van Lieshout and Scholing, 2009). Also, there is no unambiguous and exclusive relationship between vocational education and the labour market. Graduates of vocational education end up in all kinds of jobs and professions. Yet procedures presuppose that there are clearly distinguishable professional and job markets and give no attention to crowding out processes in the labour market (Brandsma in Hövels, Visser and Schuit, 2006, p. 20).¹⁶ Having fewer qualifications should reduce “border conflicts” between different KBBs (Commissie Oudeman, 2010, p. 26).

From a labour market perspective, however, it has been argued that the number of qualifications is rarely a problem in individual sectors. In fact, too little differentiation might lead to a loss of information and hinder communication in the labour market. For example, the broad label “construction worker” is less informative than “carpenter” or “bricklayer” (Van Lieshout and Scholing, 2009, pp. 33–34). In addition, firms only need to know the qualifications that are relevant to their sector and their set of occupations. These are only a small part of the total. Firms in a particular sector need detailed information but they are not bothered by detailed information on other sectors or branches (Van Lieshout and Scholing, 2009).

When considering these different views it is good to keep in mind two considerations: first, schools are not obliged to offer *all* qualifications; and second, the number of qualifications is coming down (to 612 in 2012 from 661 in 2003) (Commissie Oudeman, 2010; SBB/COLO).

¹⁶ The National Qualifications Framework’s perceived inability to cope with dynamic changes in the professional world (including the emergence of new professions) was one reason for the subsequent emphasis on competence-oriented education, according to Lenssen (2011, p. 259).

4. Dutch secondary vocational education and training (MBO) system

4.1. MBO in the Dutch education system

4.1.1. Background to secondary education

Upon leaving primary school, pupils must opt for either secondary general or secondary vocational education. Students are in full-time compulsory education until the age of 16, and part-time until the age of 18 (since 2007, compulsory education stops at the age of 18 or after a basic or minimum qualification¹⁷ has been obtained). Secondary general education consists of two substreams: higher general secondary education (*hoger algemeen voortgezet onderwijs*, HAVO) and pre-university education (*voorbereidend wetenschappelijk onderwijs*, VWO) (figure 4.1). The focus here is on the vocational education stream.

4.1.2. Preparatory secondary vocational education and training (VMBO)

The vocational stream starts with preparatory secondary vocational education and training (*voorbereidend middelbaar beroepsonderwijs*, VMBO) in four broad sectors (technology, care and welfare, economics, and agriculture), lasting for four years. After two years of education in general subjects, students choose between four learning tracks (figure 4.1):

- VMBO-BL (*beroepsgerichte leerweg*), the basic vocational track, prepares students for MBO courses at level 2.
- VMBO-KL (*kaderberoepsgerichte leerweg*), the advanced vocational learning track, prepares students for long MBO courses (MBO levels 3 and 4).
- VMBO-GL (*gemengde leerweg*), the combined learning track, is similar to VMBO-TL but is more vocationally oriented, and prepares students for MBO levels 3 and 4 (7.4 per cent of VMBO-GL graduates transferred to HAVO in 2008).
- VMBO-TL (*theoretische leerweg*), the theoretical learning track, prepares students for MBO levels 3 and 4 (with 21 per cent of graduates transferring to HAVO in 2008).

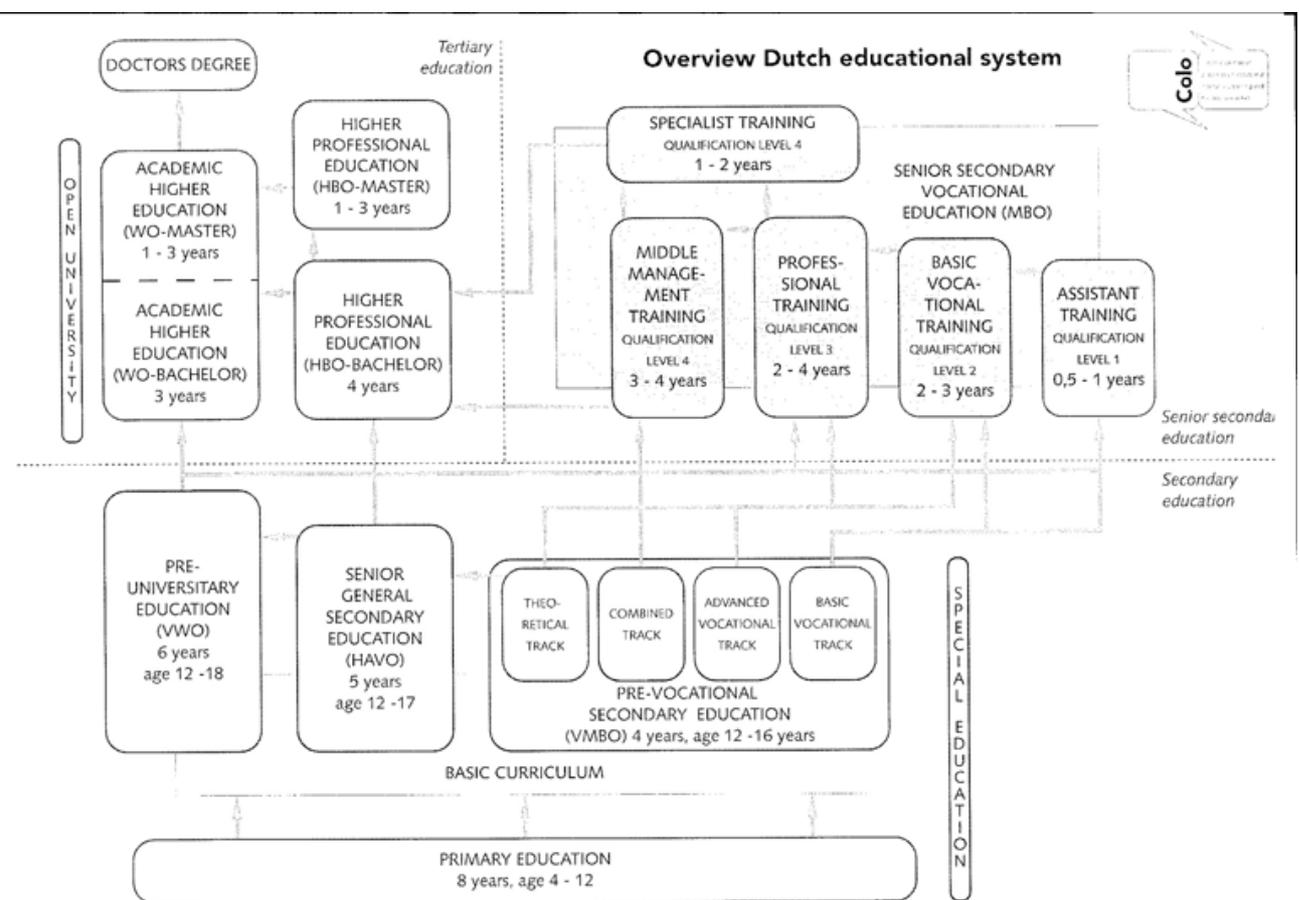
After VMBO, at age 16, students move on to senior secondary vocational education and training (MBO), the focus of this report.

¹⁷ Concerned about the high number of early school leavers without diploma and prompted by European Union Lisbon Strategy targets, the Government made it a policy priority to raise the percentage of people with a basic or minimum qualification (*startkwalificatie*), that is, the minimum level of education that young people must have to make a promising start on the labour market. In practical terms, this means that they cannot leave education after completing VMBO and must transfer to MBO. In turn, this meant that MBO level 1 should be open to all; MBO level 1 has no admission requirements.

4.2. MBO institutions

A distinction must be made between MBO institutions that are publicly funded and those that are not. Initial vocational education and training – where the bulk of MBO students are – is overwhelmingly funded by the State. Post-initial vocational education and training, in contrast, is in majority privately funded. Non-publicly funded vocational education and training institutions in turn consist of two groups: those that offer officially recognized programmes and officially recognized diplomas, and those that do not. In what follows, the concentration will be on initial vocational education and training in publicly funded institutions and on the ROCs in particular.

Figure 4.1. Overview of the Dutch education system



Publicly funded MBO has seen two waves of consolidation since the early 1980s. These two waves drastically reduced the number of institutions from close to 500 independently operating schools and institutions to 42 ROCs, 11 agricultural training centres (*agrarijch opleidingscentrum*, AOCs) and 13 vocational institutes in 2010 (Government Education Inspectorate, 2010). The sector restructuring and modernization of senior secondary vocational education and training (*sectorvorming en vernieuwing middelbaar beroepsonderwijs*, SVM) that started in the late 1980s reduced the number of vocational education and training institutions. The Adult and Vocational Education Act (Wet Educatie en Beroepsonderwijs, WEB) (see subsection 4.4.2) led to a further reduction. When the WEB was being introduced, all existing publicly funded training institutions were encouraged to merge into or to start to operate under the umbrella of the

ROCs. These ROCs had to comply with certain minimum requirements. They had to offer initial vocational education and training for at least three broad sectors and at four levels (both short and long courses), BBL and BOL (see section 4.6), and adult education. They were given a great deal of autonomy, including lump sum financing.¹⁸

The ROC concept was inspired by the community colleges as these are found in the United States of America: strongly embedded in the region and offering a large variety of different programmes. Some of the ROCs have become huge conglomerates, with the ROC van Amsterdam among the biggest with 38,655 students (of which 26,161 were MBO students) in 2010.

However, a number of publicly funded MBO institutions managed to stay outside the ROCs. Integrated “green” education and training (for example in agriculture, horticulture and nature preservation) was organized in AOCs under the responsibility, including the financial responsibility, of the Ministry of Agriculture (now part of the Ministry of Economic Affairs, Agriculture and Innovation). The second exception was made for a number of small, highly specialized vocational institutes (*vakscholen*), thanks to their close links to specific business sectors, which successfully argued the case for their continued independence. These vocational institutes are niche players active in shipping and transport, graphics, special instruments, creative professions and interior decoration, among others (for an example see box 4.1). They now operate separately from the ROCs but are recognized and funded by the Ministry of Education, Culture and Science. This report concentrates on ROC-based initial vocational education and training, which contains the largest share of students. Altogether, in early 2011, the vocational institutes had 24,000 students and offered 24 different education programmes; AOCs had 29,000 students and offered on average 56 education programmes; and ROCs had 461,000 students and offered on average 245 education programmes (Government Education Inspectorate, 2010; COLO). ROCs are discussed in greater detail in section 4.5.

Box 4.1. Rotterdam Shipping and Transport College (STC)

STC has the status of a vocational institute (*vakschool*). It is one of 13 MBO institutions that remained independent despite the 1996 WEB operation’s explicit goal of consolidating all MBO into ROCs.

STC is vertically integrated; it combines prevocational VMBO (around 500 pupils), secondary vocational MBO (around 3,000 students in programmes ranging from one to four years), and, together with the Hogeschool Rotterdam, higher education (HBO). Its narrow focus is its competitive advantage. Its training programmes are designed for the following branches: merchant marine, fishery, dredging, inland shipping, ports, road transport, shipbuilding, logistics and warehousing, and process and energy industry.

Many STC programmes make intensive use of capital and technology. STC operates two training ships (one of them seagoing) as well as state-of-the-art simulators, such as inland navigation radar, dredging, crisis management, and bulk crane and container crane simulators.

STC established subsidiaries in the Philippines, the Republic of Korea, South Africa, Viet Nam and Oman because it considered that it would be too expensive for the countries concerned to have their nationals trained in the Netherlands. So, in good logistics tradition, regional hubs were set up.

In addition to its publicly funded activities, STC has a privately funded arm that provides contract training and advice. Altogether, STC derives its income from publicly funded activities (65 per cent); privately funded activities in the Netherlands (over 25 per cent); and international activities (the balance).

STC’s management took a negative view of the consolidation of MBO into ROCs under WEB and the disintegration of VMBO, MBO and HBO in its field of activities. Mr Hietbrink, STC’s long-term Managing Director and a fierce critic of the WEB-ROC operation, considered at the time that ROCs lacked a strong “learning” infrastructure, a clear educational profile, proper coaching, a transparent curriculum and a student-oriented learning environment. Determined to avoid being absorbed into a ROC, STC mobilized its partners in the industry, with whom it maintains close contacts. Thanks to intensive lobbying of Parliament, these efforts resulted in STC obtaining the status of vocational institute (Hietbrink, 2005).

¹⁸ Lump sum financing was in fact introduced already during the SVM operation in the late 1980s.

4.3. Different levels of MBO

MBO offers four levels of programmes (levels 1 to 4) with a duration of between less than one year up to four years. MBO level 1 has no admission requirements. A VMBO diploma is required for admission to levels 2 to 4 (see figure 4.1 and table 4.1).

Successful completion of MBO level 4 gives students, in addition to a diploma, the right to enter HBO, the more practically oriented form of higher education. In other words, completing level 4 of MBO for some students is the end of the line and the beginning of a career; for others it means having earned a right to transfer to HBO. Some 44 per cent of male and 38 per cent of female level 4 graduates continued to HBO in 2010. Table 4.2 presents some key relevant education data for the Netherlands.

In 2010–11, most MBO students (230,000) were in level 4 programmes and only 25,000 in level 1 programmes (but level 4 programmes last four times as long as level 1 courses). Male/female differences are small overall but levels 1 and 2 attract more male than female students (see Appendix I).

Four-fifths of students are under 25 but, spurred on (and often sponsored) by their employers, a large number of students of 30 and over come back to school to obtain a level 1 diploma. BOL, the school-based pathway, is the most popular pathway by far, except for level 1 students and (to a lesser extent) level 2 students (Appendix I). The differences in BBL and BOL student numbers reflect the preferences of students (and their parents). But shortages of practical vocational training places for BBL students may also be a decisive factor (Hövels, Visser and Schuit, 2006, p. 46).

Table 4.1. Four levels of Dutch MBO

Level	Characteristics
Level 1 Assistant training (<i>assistenopleiding</i>)	Duration: 0.5–1 year Admission requirements: None Attainment target: Student can carry out simple tasks under supervision. Transfer: 38% of students continued their studies at MBO level 2 in 2010. Around 5% of all MBO students were studying at level 1 in 2010–11.
Level 2 Basic vocational training (<i>basisberoepsopleiding</i>)	Duration: 2–3 years Admission requirements: VMBO or MBO level 1 diploma Attainment target: Graduate can carry out executive tasks and has his or her own job responsibilities. Transfer: 42% of male and 40% of female students continued to level 3 and 5.5% and 7% respectively to level 4 in 2010. An MBO level 2 diploma meets the requirement of the minimum or basic (start) qualification level. Around 25% of all MBO students were studying at level 2 in 2010–11.
Level 3 Vocational training (<i>vakopleiding</i>)	Duration: 2–4 years Admission requirements: Diploma VMBO; MBO level 2; or three years of secondary general education Attainment target: Graduate can account for his or her activities to colleagues; monitor and guide the activities of others; work out procedures for work preparation. Transfer: 35% of male graduates and 30% of female graduates continued at MBO level 4. Around 27% of all MBO students were studying at level 3 in 2010–11.
Level 4 Middle management training (<i>middenkaderopleiding</i>)	Duration: 3–4 years Admission requirements: VMBO or MBO level 3 diploma; or three years of secondary general education Attainment target: Graduate has his or her own responsibilities in a formal and organizational

Level	Characteristics
	sense; works out his or her own procedures. Transfer: 44% of all male level 4 graduates and 38% of female graduates continued to HBO in 2010. 42% of all MBO students were studying at level 4 in 2010–11.
Level 4 Specialist training (<i>specialistenopleiding</i>)	Duration: 1–2 years Admission requirements: Diploma MBO levels 3 or 4 Attainment target: Graduate has his or her own responsibilities in a formal and organizational sense; works out his or her own procedures. Only 0.7 % of all MBO students were studying this level 4 course in 2010–11. Transfer: Graduate can transfer to HBO.

Sources: Visser, 2010; COLO; Statistics Netherlands.

Table 4.2. Netherlands: Key education data

Category	2000–01	2010–11
<i>Pupils/students ('000)</i>		
Primary education	1,644	1,646
MBO	452	530
HBO	313	417
Universities	166	242
<i>Public expenditure on education</i>		
As % of GDP	5.5	6.6

Source: Statistics Netherlands.

4.4. The Government and MBO

4.4.1. Government roles and policy shifts

The Government provides the legislative framework for vocational education. The Education Inspectorate is charged with ensuring that publicly funded education institutions and others issuing officially recognized diplomas meet certain minimum quality standards. The Ministry of Education, Culture and Science can force through (and has done so) major changes in the structure of education; sets the conditions for horizontal and vertical transfers; approves the National Qualifications Framework; and funds all initial vocational education and training. But the Government has remarkably little to say about how education is organized within education institutions, including MBO institutions. For historic reasons and by design, education institutions enjoy a high degree of autonomy by international standards.

Nonetheless, the Minister is publicly held responsible when (for example) MBO quality levels are seen to drop, or when the number of students that leave school without a diploma does not come down. Parliament regularly questions the Minister about incidents at ROCs reported in the press. Over the years there have been a number of these, which is unremarkable given that there are over half a million students and tens of thousands of MBO teachers and other staff. Often (too often according to critics) the Ministry felt compelled to react by establishing new regulations or altering existing ones. This has led to a good deal of unrest among teaching staff and senior management at education institutions (see Chapter 5).

In fact, lack of policy continuity is widely seen as a weak spot of Dutch MBO. Since the introduction of the WEB in 1996 (see next subsection) there has been, inter alia, a shift to competence-oriented education¹⁹; encouragement for vertical MBO–HBO transfers after earlier discouraging them²⁰; discouragement of ROCs from competing with each other after earlier encouraging this; experiments with performance-related pay and then abandoning these; “incessant” changes in the distribution of responsibilities for the contents, preparation and assessment of MBO examinations (Willemse and Roman, 2012); and most recently the SBB operation.^{21, 22} If anything, these continuous changes require a remarkable degree of adaptability by the management and the teachers and trainers at education institutions.

Together with the Ministry of Economic Affairs, Agriculture and Innovation (for the AOCs), the Ministry of Education, Culture and Science is the source of funding for initial vocational education and training at ROCs and vocational institutes. These ministries also fund the legal tasks of the KBBs (see Chapter 3). Students who pay a tuition fee are eligible for student loans or grants. Work placement firms enjoy fiscal benefits for training MBO students.

4.4.2. Adult and Vocational Education Act (WEB), 1996

The WEB provides the legal framework for today’s MBO. When the WEB came into force on 1 January 1996, for the first time in history all types of secondary vocational and adult education were covered by one single act.²³ The purpose of the WEB was to strengthen and integrate initial and post-initial vocational education and training, and BOL and BBL (see section 4.6 below) into one comprehensive system. The Act introduced institutional and substantial changes, such as the restructuring of schools and programmes in ROCs and a redistribution of responsibilities between central Government, education institutions and other parties, including the KBBs, and the organizations of employers and workers. The WEB also opened the way for non-publicly funded education institutions to offer education programmes within the National Qualifications Framework and to give out diplomas of equal value to those given out by

¹⁹ Competence-oriented education (*competentie gericht onderwijs*) is about knowledge and skills, but also about learning how to think, and the social skills and attitudes that are essential for doing a job well. In the business world competences stand for attitudinal and behavioural elements such as being stress resistant, taking initiatives, and displaying flexibility and empathy, which are considered essential complements to the knowledge and skills already obtained. It can be hard to train people in these behavioural and attitudinal elements. That is one reason why a growing part of education time is spent in vocational practice (Bronneman-Helmers, 2011, pp. 305–306).

²⁰ Stacking diplomas (*stapelen*) was originally discouraged because it was seen as inefficient and costly. But, inspired by the European Union Lisbon Agenda, raising the percentage of people with higher education became a policy priority and this implied, inter alia, that the possibilities for vertical transfers from MBO to HBO needed to be reinforced.

²¹ See Chapter 6 for information on SBB.

²² See Lubberman, Langejans and Kemper, 2011, for an overview of the reforms for the period to 2014 that have already been announced.

²³ Until then there were different laws covering senior secondary vocational education (MBO) and general secondary adult education (VAVO) (the Secondary Education Act); the apprenticeship system; part-time secondary vocational education and specific training for human resource services (the Vocational Education Courses Act); and education for adults (the Adult Education Act) (Moerkamp et al., 2011).

publicly funded institutions (Bronneman-Helmers, 2011; Schuit, Hövels and Kennis, 2009).

The WEB intended to increase MBO's efficiency and effectiveness; reduce the number of students who leave prematurely without diploma; facilitate them moving up to a higher level of (vocational) education (vertical transfer); and make it easier for students to switch from one education programme to another (horizontal transfer).

The WEB confirmed a number of developments that had started before it had come into force, such as intensified contact between the world of education and the business world; lump sum financing; and greater autonomy for education institutions. The consolidation trend, whereby institutions became bigger and bigger, found its apotheosis in the creation of the ROCs (see section 4.5 below). "The WEB was a milestone in a cumulative reform process that started with the open discussions that followed the publication of the Wagner Commission Report and that has not yet finished" (Van Lieshout and Scholing, 2009, p. 71). Incremental changes in policy and system development continue to this day (see for example Lubberman, Langejans and Kemper, 2011). Below, two key elements of the WEB are discussed: the ROCs (section 4.5) and the BBL and BOL pathways (section 4.6).

4.5. Regional training centres (ROCs)

By law ROCs have to offer a wide variety of programmes at different levels, both for initial and for post-initial (adult) vocational education and training. They are allowed to provide education under contract beyond the programmes regulated and funded by the Government. The thinking behind their creation was that their large scale would enable more efficient management; a more efficient use of accommodation; and the sharing of support services. The regional business community would find it easier to deal with large institutions than provide them with all types of MBO at different levels. Because of their scale, ROCs would find it easier to cope with the shifting demands of the labour market and the changing preferences of students, while students would find it easier to switch programmes.

The downside of their large size is that it makes them the dominant MBO provider in their region. They attract experienced managers with a good background in financial and organizational management but not necessarily with a background in vocational education. Many students and teachers have trouble identifying with "their" school.

As a result of their history of mergers with schools with local significance, ROCs are active at multiple locations, frequently in different municipalities. ROCs thus deal with many different stakeholders at different levels, in different municipalities. As *regional* centres they are embedded in the world of work of the region.

ROCs enjoy a good deal of autonomy, including financial autonomy, thanks to the WEB's system of lump sum financing. An important feature of the Dutch education system is "freedom of education", that is, the freedom to establish schools and the freedom to learn and teach according to one's own convictions. Both public and privately run schools are funded by the Government. Schools enjoy considerable freedom in the way they organize teaching and supervise students.

4.5.1. ROC students

ROCs have thousands of students. Because of the great variety of programmes at different levels, students with different backgrounds and from different age groups are found at ROCs, though students who come for initial vocational education and training make up the vast majority. The Youth Organization for Vocational Education and Training (Jongeren Organisatie Beroepsonderwijs, JOB) defends the interests of students (box 4.2).

Students opt for MBO for a variety of reasons. Most are fascinated by the trade that they want to be trained in and eager to start at the school and in the programme of their choice.

For others, MBO is second choice. In the last year of basic education, students are tested to determine their progress at school and their learning capabilities. Their teachers also make recommendations. For students who had aimed for secondary general education (HAVO or VWO) but whose results indicated this to be too ambitious, MBO becomes second choice. Secondary general education offers more possibilities for further development later on. Students in secondary general education can continue to higher education, but they also have the option at some point to stream into secondary general vocational education. The opposite direction – streaming into senior secondary general education from vocational education – can be long and cumbersome.

A third group are those who, because of social and family problems outside the control of the school, require intensive coaching to prepare them for the demands of working life and to keep them from dropping out of school.²⁴ By law, students cannot leave education without a basic or minimum qualification. This group is found in MBO level 1, where no admission requirements apply.

A fourth group of MBO students consists of those who do not really know what they want to be educated or trained in. Students are asked to choose between general and vocational education at a fairly early age (generally 12). Subsequently, many have second thoughts. It is therefore important for them to have the option to change both within and between the general and the vocational streams. Indeed, it has been argued that a main advantage of MBO being concentrated in large ROCs is that it makes it easier for students to switch within and between substreams. More generally, it is this group that stands to gain the most from good information on the labour market perspectives of different study programmes.

A fifth group of students follow MBO because it earns them the right to transfer to higher professional education (HBO).²⁵

²⁴ Before the 1996 WEB, this category of young people was not part of regular MBO. They would be taken care of by “*vormingswerk*”, where through intensive coaching they would be prepared for further education or for the labour market. This kind of activity was very student oriented and “contrasts with the prevailing paradigm at the ROCs, which are very labour market oriented and which make great attempts to ensure that no student leaves without a start qualification” (Hövels, Visser and Schuit, 2006, p. 53 ff).

²⁵ There are many more groups (mainly adults) studying at ROCs, including those who return to school for employer-sponsored refresher courses, and those studying for the diploma that they did not receive during their initial education.

Box 4.2. Youth Organization for Vocational Education and Training (JOB)

JOB represents the interests of the MBO students. It takes part in periodic meetings organized with parents and student organizations. Every other year JOB publishes the *Job Monitor*, in which students give their views of MBO institutions. It has a hotline for complaints, and takes action (often together with partner organizations) to protest against perceived shortcomings, for example the poor quality of education (in 2007 and 2008) or announced cost savings (in 2010) (Bronneman-Helmers, 2011).

The latest (2010) *Job Monitor* paints a slightly more positive picture of MBO than earlier *Monitors*, but found that certain sources of concern were still an issue to many students, including contacts between schools and work placement firms; the supervision of students during their work placement; and how best to align the school-based part and the work placement part of training.

4.5.2. The “R” in ROCs and macroefficiency

The ROCs were expected to develop close contacts with the local authorities and employers in their regions; act as key players in a closely knit regional network; and so ensure a good match between educational programmes and the regional labour market. They have largely met these expectations.

However, the WEB never defined the “R” (for “regional”) in ROCs.²⁶ There was no clear territorial demarcation and the more ambitious ROCs soon started to compete for students with their neighbours, all the more since, at first, they were encouraged to do so. Indeed, one goal of the autonomy given to the ROCs was to encourage them to become more market oriented, and to compete with one another.

Related to the ill-defined area of operation for individual ROCs is the issue of “macroefficiency” (*macrodoelmatigheid*), or the alignment of the demand for and the supply of education programmes. Employers have expressed concern that ROCs attract too many students to popular programmes for which labour market perspectives are at best unproven and at worst poor. Representatives from sectors with looming shortages of good candidates have been particularly vocal in expressing this view.

Education institutions counter these concerns by saying that in the end most students who follow these programmes do find a job after graduation, if not necessarily in the original line of study. Also, in the programmes concerned, students learn many competences that are useful in related fields. At first sight this may look inefficient (why not train students for the related field straight away?), but ROCs argue that in light of the Government’s objective to keep students from dropping out of school, it is far better for students to follow a programme of their own choice than to lose them because they are unhappy in or with the programme they are attending.

4.6. The school-based pathway (BOL) and dual pathway (BBL)

ROCs offer two MBO paths (BOL and BBL) towards the same diploma. This explicit parallel institutionalization of BOL and BBL created by the WEB is typical for the Dutch MBO (Van Lieshout and Scholing, 2009).

²⁶ When the WEB was introduced, the Government did have a regional demarcation in mind. But given the autonomy it had awarded the ROCs, it lacked the means to enforce this.

- BOL (*beroepsopleidende leerweg*) is the school-based pathway with practical training periods at the workplace. In this more theory-oriented pathway the proportion of practical occupational training is between 20 and 60 per cent.
- BBL (*beroepsbegeleidende leerweg*) is the dual pathway with apprenticeship training. In the BBL learning pathway, students spend at least 60 per cent of their time in on-the-job training and receive general education and related theory the rest of the time. Students have a contract with the company or institution where they are being trained.

BOL and BBL are equivalent pathways to the same qualification but individual MBO institutions need not offer both. Students choose the pathway that suits them best. Table 4.3 shows numbers and proportions of students following the two pathways.

Table 4.3. Students in MBO by pathway (2000–11)

Year	2000–01	2005–06	2008–09	2010–11
Total ('000)	452	484	514	530
<i>of whom in:</i>				
BOL	299	347	342	358
BBL	153	137	172	172
<i>Percentages</i>				
BOL	66	72	67	68
BBL	34	28	33	32

Source: Statistics Netherlands.

The number of apprenticeships (BBL pathway) available is sensitive to the state of the economy. The higher the level of economic activity (overall or in a particular sector), the more apprenticeships will be on offer. When economic activity is slow, these offers of apprenticeship decrease; however, that is precisely when students need them most.

The strength of the Dutch system is that, when apprenticeships are scarce, students have the more school-based BOL alternative and still end up with the desired qualification. Because of their equal status, BOL and BBL act as communicating vessels.

Nonetheless, even though BBL and BOL lead to the same diploma there are still differences between them. First, roughly 50 per cent of all programmes are only offered in either BBL or BOL (and not both) (Van Lieshout and Scholing, 2009). In addition, there are differences in:

- **The characteristics of the programme.** The share of the practical component differs (BOL, 20–60 per cent; BBL, at least 60 per cent).²⁷ BBL students pay a lower yearly education fee.
- **Student status.** There are differences in the legal position of the students when they do their practical work (BOL, trainee; BBL, employee); the source of their

²⁷ Van Lieshout and Scholing (2009, p. 53) note that BOL and BBL are becoming more similar in the time spent doing practical work. The practical component of BOL is increasing and so BOL is slowly moving in the direction of BBL.

income (BOL, student loan or grant; BBL, apprentice wage); and their employment status (BOL, over and above the regular staff; BBL, staff member).

- **The ease of finding a job and the likelihood of further study.** For BBL students it is easy to find a job after graduation (they already have a job during their study). Fully 95 per cent of all 2008 BBL graduates were found to have a job after three months (78 per cent of them at the firm where they did their practical occupational training), compared to 82 per cent for BOL students (Statistics Netherlands, 2011). Students who continue to HBO are mainly BOL students.

Van Lieshout and Scholing (2009) also note that, intuitively, certain students may feel more attracted to BOL and others to BBL. Some students consider themselves too young to be employed and feel more comfortable in a protected school environment. In contrast, those who choose BBL are more of the hands-on type; or they follow BBL because they need the income (BBL students are, on average, older than those following BOL).

Furthermore, the preparation of students for certain occupations is traditionally better suited to the BBL pathway, while for others the BOL pathway is the preferred route. In 2008, the percentage of all students in the economics/business and health/welfare sectors was higher in the BOL pathway (36.4 per cent and 35.4 per cent) than in the BBL pathway (24.5 per cent and 23.3 per cent). In contrast, in the technology sector the percentage of all students in BBL was double that of the students in BOL (45.3 per cent versus 22.6 per cent) (Visser, 2010, p. 31).

5. Teaching and training staff

Teachers and trainers have been at the receiving end of the many changes (mergers of institutions, greater market orientation, WEB, SVM, and the shift to competence-oriented education, to name but a few) that have been initiated in the past two decades. MBO has been the subject of many reports, which frequently were the prelude to minor or major regime changes (see Bronneman-Helmers, 2011, for an overview). Many of these changes have been welcomed as improvements but teachers have at times been exasperated when new changes were announced before the effects of the latest round had been digested.

MBO teachers differ from other secondary school teachers in that many became teachers after a career outside education. In fact, most MBO teachers (59 per cent) had a job outside education before joining MBO; 19 per cent had been previously active in MBO; and only 8 per cent joined immediately after finishing teacher training (the remaining 14 per cent did not have a job when recruited, among them people who rejoined the labour force after a long absence) (Lubberman, Langejans and Kemper, 2011, p. 32). MBO teachers thus have a lot of practical work experience: over half of new recruits had over 10 years, and one third over 20 years of professional experience (Lubberman, Langejans and Kemper, 2011, p. 33).

Teachers have first- or second-level teaching qualifications. First-level teachers are licensed to teach at all levels of secondary (including secondary vocational) education. Second-level teachers are only licensed to teach at lower levels of secondary education. Those with second-level qualifications obtain their licence through the relevant HBO teacher training programme. They can do so full time, part time, or by combining work and study. To obtain a first-level teaching qualification requires further study at the tertiary (HBO or academic higher education) level.

MBO welcomes people with experience in a particular profession to become teachers in subjects related to their profession. These people must commit themselves to obtaining a licence within a set time limit (usually through a shortened version of the standard teacher training programme) in order to become eligible for a contract without limit of time.

In addition to fully licensed teachers, MBO employs teaching assistants who help teachers in the preparation of courses and the organization of activities. Teachers can concentrate on their core duties of teaching, supporting students doing their practical vocational training, and developing teaching materials while teaching assistants take over less complex tasks. Roughly 10 per cent of all teaching is done by teaching assistants (Groenberg and Visser, 2011, p. 43). Teaching assistants are trained and educated at MBO level 4.

5.1. Salaries and working conditions

Since 2003, primary and secondary working conditions have, in principle, been negotiated between MBO employers who are grouped in the MBO Council (MBO Raad) and workers' organizations. Prior to 2003 these negotiations took place with the central Government but in 2003 the Government passed on this responsibility to the MBO Council as part of its decentralization drive. The collective labour agreement allows for certain working conditions to be determined at the level of individual MBO institutions. Some working conditions, notably pensions, continue to be decided at the central Government level.

Depending on their experience and responsibilities, teaching staff are employed at levels LB, LC or LD. Level LB teachers are part of a team of teachers; level LC teachers have additional responsibilities for the development of programmes and examinations; and team heads and others with management duties are paid at level LD. Monthly salaries excluding allowances range from 2,445 euros for starter LB-level teachers to 4,962 euros for experienced LD-level teachers.²⁸ The gross monthly earnings of teaching assistants range from 1,449 euros to 2,560 euros per month.

Education salary scales are basically fixed. It is not common to offer teachers bonus payments but it is the subject of much discussion (and, until very recently, of some experiments). On the whole, performance-related pay is not popular among teachers, although teachers with previous industry experience were found to take a more positive view (Van Schoonhoven and Olthof, 2011, pp. 13–14).

The distribution of teachers by category shows a significant increase in the share of teachers in the lowest (LB) category (from 41.4 per cent of the total in 2006 to 48.3 per cent in 2011) and an equally significant decrease in the number at the LD level (from 10.5 per cent of the total in 2006 to 6.2 per cent in 2011) (table 5.1). The consequent decline in the average salary paid saves money for the education institutions, which are paid a lump sum based mainly on the number of students.²⁹ But it cannot be seen in isolation from the persistent complaints about the declining quality of education.

Table 5.1. Salary mix: MBO teachers (% of teachers by salary scale, full-time equivalent) 2006–11

Salary scale	2006	2007	2008	2009	2010	2011
LB	41.4	42.7	45.6	47.1	48.4	48.3
LC	47.0	45.9	44.7	44.6	43.9	44.2
LD	10.5	10.3	8.8	7.3	6.8	6.2
LE	1.0	1.0	0.8	0.2	0.1	0.1
Other	0.1	0.0	0.1	0.8	0.7	1.2

Source: <http://www.functiemix.minocw.nl>.

The shift in the salary mix must take account of two factors. First, the sector employs many senior people, and the salary average is brought down when they are replaced by younger persons upon retirement. Second, a significant number of teachers work on flexible contracts, are not paid according to the collective labour agreement, and do not show up in the salary mix calculations presented in table 5.1.

According to their collective labour agreement, teachers have the right to 60 hours each year for learning and keeping their professional skills up to date. To this end, more and more ROCs are setting up their own education centres, or “ROC academies” (Moerkamp et al., 2011). Teachers must account to their employer how they plan to use the 60 hours. If the learning trajectory is initiated by the employer, all costs (course fees, exams, material, travel and lodging) are paid by the employer. When retraining is considered to be basically in the interest of the employee, he or she has the right to unpaid leave.

²⁸ See Ministry of Education, Culture and Science website. <http://www.werkeninhetonderwijs.nl>.

²⁹ The salaries of top MBO management do not appear to have suffered, though. Several top MBO managers earn over 200,000 euros per year, well over the “*Balkenende norm*”, the equivalent of the salary paid to the Prime Minister.

In addition, the Government offers stipends to individual teachers for retraining purposes. In 2011, one in every six MBO teachers participated in a training programme; one third of these were enrolled in a teacher training course. About one third (31 per cent) of the MBO teachers who participated in a training programme were sponsored by the Government (through the stipends); 36 per cent of them were sponsored in whole or in part by their employer (Lubberman, Langejans and Kemper, 2011).

Business is more concerned that teachers give priority to updating their pedagogical skills and theoretical knowledge than to their practical professional skills. It considers that, in principle, the quality of teachers is the responsibility of their employers (the education institutions), but it is aware that it is also in its own interest that teachers keep their professional skills up to date. Each year, the Association of Employers in the Automobile Branch (BOVAG) organizes a summer school especially for them. Other sectors are also taking initiatives to strengthen professional contacts with teachers.

All in all, some 55,000 people work in MBO. As is the case with so many sectors in the Netherlands, a significant number of teachers work part time. The number of full-time equivalent (FTE) staff was 44,500 in 2010 (table 5.2).

Table 5.2. Employment in MBO (excluding AOCs) and AOCs (2006–10), FTE

Type	No. FTE 2006	No. FTE 2010	Change 2006–10
<i>MBO (excl. AOCs)</i>			
Management	400	700	+75.0%
Teaching staff	23,200	21,400	-7.8%
Other staff	13,200	16,700	+26.5%
<i>Total MBO</i>	<i>36,800</i>	<i>38,800</i>	<i>+5.7%</i>
<i>AOCs</i>			
Management	60	140	+133.3%
Teaching staff	3,960	3,790	-4.3%
Other staff	1,300	1,640	+26.2%
<i>Total AOCs</i>	<i>5,320</i>	<i>5,570</i>	<i>+4.5%</i>
Total MBO and AOCs	42,120	44,370	+5.7%

Source: Stamos quoted in Lubberman, Langejans and Kemper, 2011.

The figures in table 5.2 show a significant decrease in the number of teaching staff both in absolute numbers and in share of the total (and, as with the figures in table 5.1, provide ammunition to those concerned about the quality of education). The disproportionate increase in management staff in turn lends support to teachers' complaints about bureaucracy.

But the figures also hide another noteworthy fact on the employment of MBO teachers. According to Lubberman, Langejans and Kemper (2011), one reason why the number of teaching staff has been lagging behind the increase in overall staff numbers is that the figures do not include teachers who are working on flexible contracts through private employment agencies, "payrolling", or as self-employed, which might be a major explanation for the decrease in the number of teachers shown in the table. Those authors also quote a report (SEOR, 2010) that noted a trend for certain ROCs to hire teachers first under flexible contracts before offering them an employment contract. Depending on the ROC, the number of flexible staff could be up to 20 per cent of the total. More

recent research appears to confirm this trend (Lubberman, Langejans and Kemper, 2011; SEOR, 2010).

5.2. Teacher shortages?

As mentioned earlier, MBO teachers are on average older and have more work experience outside education than other secondary schoolteachers. In fact, their average age is increasing; between 2006 and 2010 the percentage of MBO and AOC teachers aged 50 and over rose from 52 per cent (AOC, 37 per cent) to 57 per cent (AOC, 44 per cent) (Lubberman, Langejans and Kemper, 2011, p. 16). This is partly by design. As is happening in other sectors, fiscal benefits that encourage teaching staff to retire early are being or have been phased out.

Is the rising average age of MBO teachers an indication of coming recruitment problems? Opinions are divided on this question. MBO has a tendency to recruit experienced, older people, so to have an older teaching population should not be seen as unusual. General secondary education, which competes for good teachers with MBO in a number of subjects, expects shortages. Nonetheless, the Ministry of Education, Culture and Science does not expect significant staffing problems (with the exception of care and cure, and technical and economic subjects). This is because, first, the number of students is forecast to decline by some 20 per cent between 2012 and 2020; and second, MBO can always recruit people from the business world. Nonetheless, for sectors and subsectors where business itself expects shortages, such as in technical, transport, and medical and paramedical professions (Lubberman, Langejans and Kemper, 2011), this may prove to be a rather optimistic view.

The “market” for MBO teachers is comparatively open. The percentage of teaching staff that resigns voluntarily is comparatively high at over 35 per cent. For these people, the main factors behind resignation – lack of career prospects, search for new challenges, dissatisfaction with management and the distribution of duties – outweigh the main factors encouraging their colleagues to stay and continue teaching – job content, work atmosphere, independence, salary and challenging work environment (Lubberman, Langejans and Kemper, 2011, p. 29).

5.3. Job satisfaction

In a survey, MBO teaching staff were found to be less content with their job and the institution in which they taught than other people employed in MBO and compared to teachers overall. In 2011, 69 per cent of MBO teachers were either satisfied or very satisfied with their job, the overall figure for MBO staff being 78 per cent and for personnel in all types of education 79 per cent. What is more, MBO teachers were found to be far from satisfied with their school or the institution in which they taught. Only 48 per cent (compared to 65 per cent for other people employed in MBO and 72 per cent for teachers overall) said they were satisfied or very satisfied, up slightly from the 2009 figure of 44 per cent (Lubberman, Langejans and Kemper, 2011, p. 40). MBO teaching staff liked their job content, their independence and their relations with colleagues. But they expressed dissatisfaction with the bureaucracy, the way their institution or school was being managed, and the work pressure (Lubberman, Langejans and Kemper, 2011, p. 41; also Van Kuijk, Van Rens and Vrieze, 2011). This high level of dissatisfaction may dissuade some people from becoming MBO teachers and cause others to leave the profession. The non-attendance percentage for teaching staff crept up from 4.7 per cent in 2006 to 6.0 per cent in 2010 (Lubberman, Langejans and Kemper, 2011), which in turn can affect students’ satisfaction levels when they do not get the number of lessons

that they are entitled to. Other surveys quoted by Van Kuijk, Van Rens and Vrieze (2011) broadly confirm this picture of dissatisfaction with a top-down culture, excessive hierarchy and bureaucracy, and poor intra-organizational information and communication flows (Van Kuijk, Van Rens and Vrieze, 2011, p. 11).

6. Conclusion

This report on initial vocational education and training at secondary level or MBO has focused on the situation since 1996 when the WEB (Adult and Vocational Education Act) was introduced. More precisely, it has focused on the ROCs, where the bulk of initial vocational education and training takes place.

The Dutch MBO system is characterized by the great autonomy of its education institutions, which enjoy considerable freedom in the way they organize teaching and supervise students. The Government plays a comparatively restrained role: it sets the legal framework for education; is responsible for funding and quality control; sets criteria for the National Qualifications Framework; and establishes funding rules and regulations.

Since 1987, the National Qualifications Framework, the nationwide basis of the Dutch regulatory regime for adult and initial vocational education, has been drawn up by the KBBs in a joint undertaking of employers, workers and the education sector. KBBs also make sure that there are sufficient places for students' practical occupational training.

MBO offers two types of pathways: a school-based pathway (BOL) with at least 20 per cent of time in practical occupational training; and a dual pathway (BBL) with apprenticeship training. These two pathways have equal status, lead to the same diploma, and are provided by the same education institutions. This offers a great deal of flexibility to students, who can choose the pathway that best suits their needs given the state of the labour market. When economic growth is slow and the number of available BBL apprenticeships is low, students have the more school-based BOL alternative and still end up with the desired qualification.

The lowest level of MBO has no admission requirements. It is thus accessible to all and so contributes to social integration.

The 1996 WEB consolidated MBO into 42 large-scale ROCs offering a large number of educational programmes at different levels. This restructuring was intended to increase MBO efficiency and effectiveness; reduce the number of students who leave prematurely without diploma; facilitate students moving up to a higher level of vocational education (vertical transfer); and make it easier for students to switch from one education programme to another (horizontal transfer). Because of their large size, the ROCs were to find it easier to cope with the shifting demands of the labour market and the changing preferences of students, while the students themselves would find it easier to switch programmes.

By and large the WEB and the ROCs have met these expectations. Few believe that pre-WEB MBO would have been better able to accommodate the many structural changes that have taken place in the economy and the labour market, not to mention the greater cultural and ethnic diversity of students (Lenssen, 2011). Yields have increased and so have vertical and horizontal transfers. The percentage of students transferring from MBO to HBO has increased from some 25 per cent in 1996 to 40 per cent in 2010-11.³⁰ The percentage of students who leave school without a diploma has decreased.³¹

³⁰ This possibility to transfer is seen as a strong point of Dutch MBO. However, the sharp increase in the number that is actually transferring each year is also a source of concern for the Government because it threatens to reduce MBO's significance for the labour market (Moerkamp et al., 2011, p. 54).

But the number of drop-outs is still high. Quality of education is a factor in this: fully 52 per cent of BOL students who left education without a diploma gave its low quality as a reason.

The downside of the ROCs' large size is that it makes them the dominant supplier of MBO in their region. Students and teachers complain about a top-down culture, bureaucracy, and poor intra-organizational information and communication flows. Contacts between schoolteachers and mentors at work placement firms and, more generally, the alignment of the school-based part and the work placement part of training are other sources of concern.

Dissatisfaction with quality is greater among the larger ROCs than among the smaller vocational institutes, where students and teachers find it easier to identify with "their" school. But smaller schools do not perform systematically better than bigger schools. There are great quality differences in performance among as well as within institutions, irrespective of size. Partly this has to do with the type of students. For example, the number of students "at risk" (who have a below-average likelihood of obtaining a diploma) is twice as high in ROCs located in the four big cities than it is in ROCs in the rest of the country.

How to improve the quality of education has become a top political issue. Quality has several dimensions: quality of education; quality of examinations; and "basic" quality, for example how institutions handle cancelled and rescheduled lessons, how they communicate with their students about this and how they handle complaints.

The Ministry of Education, Culture and Science has taken or announced a number of measures aimed at increasing quality (but the autonomy of the schools limits the number and type of instruments the Ministry has at its disposal). It has started to publish the names and locations of educational programmes that the Education Inspectorate found to be substandard; it has informed schools that it will withdraw their licences for programmes that are persistently below standard; and it has made available extra funds for the professionalization of teachers and experimented with performance-based pay (since stopped). It wants to make it easier for experienced people from outside the teaching profession to become teachers. It is putting pressure on the institutions to improve the "salary mix"³² (the share of all salaries that goes to junior and to senior teachers).

Schools now have a duty to inform students of the labour market perspectives of their educational programmes. They are also obliged to keep "competence files" on each teacher's competences in terms of organizational, professional, interpersonal and pedagogical skills. These files must specify how teachers intend to improve their skills and keep them up to date.

The problem is that by tightening the framework in which schools operate through more and different rules and regulations the Ministry adds to their administrative duties, a source of work for the schools' administrators and a source of irritation for teachers and trainers on the educational "shop-floor".

Many in education have trouble coping with the "incessant stream of change" and the "regularly shifting expectations of the Government". They want greater continuity in

³¹ from 9.3 per cent in 2005–06 to 7.8 per cent in 2008–09 (Commissie Oudeman, 2010).

³² By 2014, 25 per cent of teachers (FTE) should be paid at level LB, 65 per cent at level LC, and 10 per cent at level LD (against 48.3 per cent LB, 44.2 per cent LC and 6.2 per cent LD in 2011).

policy-making; and when policies do change they demand open communication with all concerned about the underlying visions and the possible consequences (Van Kuijk, Van Rens and Vrieze, 2011; also Commissie Oudeman, 2010). In May 2012 in an open letter, employers' and workers' organizations in the education sector together urged all political parties to provide the sector with *beleidsrust*, which is best translated as “no more new policy initiatives”, the argument being that in the past few years “so many new policy initiatives have been introduced and then changed or altered before they were properly implemented” (Stichting van het Onderwijs, 2012).

The critique of the quality of MBO has led to another important development. The worsening public image of MBO (and the effects of this on its popularity among students) has brought education and the social partners closer together. After some serious soul-searching on both sides, their desire to improve the public image and performance of MBO together in partnership gained the upper hand.

The Foundation for Cooperation on Vocational Education, Training and the Labour Market (Samenwerking Beroepsonderwijs Bedrijfsleven, SBB), which started operating in early 2012, must be seen in this light. The goal of the SBB is to formally bring together the world of education and the world of business, and to have a platform for solving ongoing problems (for example regarding the National Qualifications Framework, practical occupational training, macroefficiency and examinations) and possible future problems between the two partners by formulating binding agreements. The Minister of Education, Culture and Science has appointed the SBB as the focal point for everything related to MBO. To the outside world the SBB confirmed the social partners' and education sector's determination to show that from now on they will solve their disagreements through direct contacts and without political interference (box 6.1).

To underline the SBB's ambitions and to demonstrate to what extent it constitutes a break with the past, one of SBB's designated co-presidents commented: “When the next problem comes up, each party should not have thick reports published to show how right it is ... nor start lobbying political allies, but instead discuss it in the SBB with the purpose of finding a solution that binds both parties.”³³

Twenty-five years after the social partners were first given a formal role in Dutch MBO, education and business have come to appreciate that the interests of MBO and the thousands of students it educates and trains every year are best served by direct dialogue, mutual respect and understanding. Two lessons from the Dutch experience would appear to be, first, that it is entirely feasible for the social partners to play a meaningful role in the contents and structure of vocational education and training; and second, that to bring this about can be a long and drawn-out process in which legislation is only a first step.

³³ Quoted in Bronneman-Helmers, 2011, p. 322. Translation from the Dutch original by the author.

Box 6.1. Foundation for Cooperation on Vocational Education, Training and the Labour Market (SBB)

With the creation of the SBB the education institutions, the social partners and the Minister wanted to show to the outside world that the parties concerned were capable of solving their differences of view without calling on third parties for help, all in the interest of MBO. The SBB received a broad mandate. Financial flows to the KBBs pass through the SBB.

Its theme advisory committees will advise the Minister on macroefficiency, qualifications and examinations, and practical occupational training. Each of these committees has an equal number of members from education (four) and the labour market (four).

The SBB Executive Board consists of 12 members: six members from the educational field (one of which represents the staff of the education institutions), and six members representing the labour market (three employers' and three workers' representatives). This is a change from the KBBs, where the social partners nominated two thirds and education one third of the board members.

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Appendix I. MBO students by level (2010–11)

	Total	Level 1	Level 2	Level 3	Level 4
Students ('000)	530	25	130	145	230
Percentage:					
<i>Gender</i>					
Male	53	65	64	48	49
Female	47	35	36	52	51
<i>Age</i>					
15–19	56	39	62	49	59
20–24	26	13	17	30	29
25–30	5	9	5	6	4
30 and older	13	38	16	14	8
<i>Pathway</i>					
BOL	68	43	51	58	85
BBL	32	57	49	42	15
<i>Programme</i>					
Teacher training	2	–	–	–	5
Design, audiovisual	5	–	1	2	10
Commerce, administration, legal support	19	4	16	21	21
ICT	4	–	3	5	5
Technology, industry, building trades	21	27	31	18	15
Agriculture, animals	4	12	4	4	4
Care, cure	24	6	14	32	25
Consumer services, transport, safety	19	6	30	19	14
General	2	44	–	–	–

Source: Statistics Netherlands.

Appendix II. People interviewed

Ms Heleen de Boer	Policy Advisor, Construction Workers Trade Union
Ms Thea van den Boom	Senior Advisor, Technical and Vocational Training Directorate, Ministry of Education, Culture and Science
Ms Isabel Coenen	Policy Advisor, Federation of Dutch Trade Unions
Ms Ir. Gertrud van Erp	Education Secretary, Confederation of Netherlands Industry and Employers
Ms Patricia Faber	Advisor on Labour Market and Education, Trade Union for Workers in the Retail, Services, Industrial, Metal, Agricultural, Technique, Temporary Agency Work and Transport Sectors
Prof. Dr. Hans Heijke	Fellow, Research Centre for Education and the Labour Market
Mr Jos Kleiboer	Manager, Labour Relations, BOVAG: Association of Automobile, Lorry and (Motor) Cycle Sellers and Repair Shops
Dr André van der Leest	Manager, Vocational Training, Royal Dutch Association for Small and Medium-Sized Companies in the Metal Industry
Dr Marc van der Meer	Director, ECBO: Centre for Expertise in Vocational Education and Training
Mr Chiel Renique	Advisor, Education and Training, Confederation of Netherlands Industry and Employers
Mr André Steenhart	Teacher, Trade Union AOB, TVET sector
Mr Peter Vrancken	Member of the Management Board, Da Vinci College, Dordrecht
Mr Hylke Warners	Policy Advisor, BOVAG: Association of Automobile, Lorry and (Motor) Cycle Sellers and Repair Shops
Dr Anneke Westerhuis	Programme Leader, ECBO: Centre for Expertise in Vocational Education and Training
Dr Ilya Zitter	Researcher, ECBO: Centre for Expertise in Vocational Education and Training