# Measuring the world of (vocational) education – the Report on Vocational Education and Training and the BIBB Data Report



Germany's National Education Report, first published in 2006, is the first comprehensive report covering all areas of education. However, ongoing reporting in the field of vocational education and training (VET) has been in place for more than 30 years in the form of the Report on Vocational Education and Training published by the Federal Ministry of Education and Research (BMBF). The Federal Institute for Vocational Education and Training (BIBB) has thus far been involved with the preparation of this report within the scope of its statutory functions. Following a realignment of the Report on Vocational Education and Training in 2009, BIBB now issues the Data Report, a new standard work on VET. The Data Report is based on selected indicators and depicts the main developments within initial and continuing vocational education and training within an international context. In addition, different focal topics are dealt with each year.



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### Increasing interest in indicatorsbased reporting

The aims of ongoing educational reporting are to improve the data basis for educational policy decision-making processes and increase "knowledge of the effectiveness of the educational system" (cf. TIPPELT 2009, p. 7). The OECD publication "Education at a Glance" (OECD 2010) has been providing annual information on participation in education, educational qualifications and investments in education for more than ten years and is a significant cornerstone for benchmarking processes at an international level (cf. Krüger-Hemmer/Schmidt 2010, p. 11). During recent years, further activities for the improvement of educational reporting at a national level have followed. In 2009, Austria presented its first National Education Report (cf. Specht 2009). In 2006, Switzerland published a prototype for national educational reporting (SKBF 2006). 2006 also saw the first "Education in Germany" Report, laying the foundations for ongoing educational reporting with the aim of encompassing all areas of education from early childhood education to continuing training for adults (Konsortium Bildungsberichterstattung 2006; Autorengruppe Bildungsberichterstattung 2008). Other reports on education are also published for individual federal states (cf. e. g. Institut für Bildungsmonitoring 2009; LANDER 2009), for cities and towns and for local government authorities (cf. e. g. Schul- und Kultusreferat der Landeshauptstadt München, Stadt Dortmund 2008).1

## The German Report on Vocational Education and Training

Although this form of reporting is seen as an innovation within the educational system as a whole, it has a long tradition in the field of vocational education and training.

<sup>1</sup> There are also various reports covering individual sectors (e. g. higher education institutions) or aspects of the education system (e. g. educational spending). For a summary, cf. e. g. DÖBERT/AVENARIUS, pp. 300 ff.

### Data Report accompanying the Report on Vocational Education and Training



### Structure

- Indicators for initial vocational education and training (Chapter A)
- Indicators for continuing vocational training (Chapter B)
- Focus topic: "Transition from training to employment" (Chapter C)
- Programmes and pilot initiatives (Chapter D)
- International indicators and benchmarks (Chapter E)

Frequency of publication: annual

#### **Publication dates**

- Draft version (PDF) published online in April when the Report on Vocational Education and Training has been adopted by the Federal Cabinet and published
- Printed version published in June (print run currently 5,000)
- Online version (HTML) with additional information and search function published in August

### Internet

http://datenreport.bibb.de/ (German language resource; selected results provided in English)

Since 1977, the ministry responsible (at the time the Ministry of Education and Science) has been fulfilling its statutory task in this regard and presented the first Report on Vocational Education and Training in that year.<sup>2</sup> At the time, the report was still produced on the basis of § 5 of the Act for the Promotion of the Provision of Training Places in Vocational Education and Training (APIFG) of 7 September 1976. The Report on Vocational Education and Training has been providing annual information ever since, the current foundation being § 86 of the Vocational Training Act<sup>3</sup> (cf. box). This information includes the number of newly concluded training contracts, associated developments on the training places market and the further development of vocational education and training at large.

### § 86 Paragraph 1 BBiG

The Federal Ministry of Education and Research shall monitor developments in vocational training on a continuous basis and shall for this purpose present a report to the Federal Government (the Report on Vocational Education and Training) by 1 April each year. Said report shall portray the status and anticipated further developments of vocational education and training.

Whereas the National Education Report features a chapter entitled "Vocational Training," which concentrates on a

2 Many of the recent Reports on Vocational Education and Training are available in English by searching for "Report on Vocational Education and Training" at http://www.bmbf.de.

3 Vocational Training Act (BBiG) of 23 March 2005 last amended on 7 September 2007 by Article 9b of the Act. number of central indicators, the Report on Vocational Education and Training has "now established itself as a kind of 'main ledger' of vocational education and training (...) and is currently the central data compendium" (BAETH-GE/WIECK 2006, p. 171). Reports relating to vocational training remain rare at a federal state, district or local government level (cf. e. g. Thüringer Ministerium für Wirtschaft, Arbeit und Technologie 2009, Koordinierungsstelle Schule – Beruf 2009).

# The Data Report accompanying the Report on Vocational Education and Training

BIBB published its first Data Report (BIBB 2009) to accompany the Report on Vocational Education and Training in conjunction with the 2009 Report on Vocational Education and Training (BMBF 2009). The preparation of the Data Report is based on a recommendation made by the BIBB Board to restructure the Report on Vocational Education and Training and separate it into a policy section, which forms the object of consultation and resolution by the Federal Government, and a non-policy section, for which BIBB is responsible (cf. BIBB Hauptausschuss 2008, p. 2). The task of BIBB within this process is to "be involved in the preparation of the Report on Vocational Education and Training" (§ 90 BBiG). In the past, BIBB had already provided essential "information and data on vocational education and training" in Part II of the Report on Vocational Education and Training.

### **Indicators-based reporting**

From the very outset, the design concept and alignment of the Data Report accompanying the Report on Vocational Education and Training ensured that reporting was based on suitable indicators (cf. box). A pragmatic understanding of the indicators forming the foundation of the report has been adopted (cf. DÖBERT/AVENARIUS 2009, p. 310; WITTMANN 2010).

### Indicators

Indicators are quantifiable parameters (absolute values or ratios) with which particular facts and realities (actual values) in the domain of vocational education and training can be rendered measurable (operationalised), and trends can be charted over time (cf. Schnell/Hill/Esser 1995, pp. 121 ff.). They constitute an important foundation for regular reporting in vocational education and training. The contrasting of measured values and stock variables with normative, social ideals or stipulated policy targets (target values) draws attention to issues requiring (policy) action and may be used as a basis to inform the design of vocational education and training (policy guidance).

The selection of indicators tends to take place implicitly and is strongly aligned to the availability of suitable data and to central educational policy issues. Alongside official and process data (e. g. VET statistics produced by the statistical offices of the Federal Government and the federal states, employment statistics from the Federal Employment Agency, BA), indicators are also drawn from the institute's own surveys (e. g. BIBB survey on newly concluded training contracts as of 30 September (cf. box). In addition, BIBB conducts its own studies on specific topics either on a one-off basis or on a particular cycle (including the BA/BIBB Applicant Survey, the BIBB School Leaver Survey and the BIBB Transition Study).

Some of the indicators used were already covered in the BMBF Report on Vocational Education and Training. Others were given sharper definition for the Data Report, whilst new indicators have also been developed. One aim of naming it the "Data Report" was to make it clear that it is mainly based on empirically determined parameters.

The indicators used in the Data Report are usually continued year-on-year in order to be able to map developments in vocational training over longer periods of time. The Board of BIBB also took the view that such long-term monitoring was required, and to this end recommended the development of "long series" to form an object of reporting each year (BIBB Hauptausschuss 2007, p. 2). Notwithstanding this, the inclusion of further indicators can make sense for certain facts and issues and for finite periods of time. Depending on future development, it is in turn conceivable that some facts and circumstances may cease to be relevant for vocational training, resulting in the exclusion of indicators previously used.

Alongside the work conducted by BIBB staff, contributions from external institutions are also used to inform the Data Report accompanying the Report on Vocational Education and Training. The 2011 edition, for example, contains indicators from the Institute for Employment Research (IAB) and the German Institute for Adult Education (DIE). These indicators were developed in conjunction with BIBB. Expert reports provide access to further interesting data sources and information for the Data Report.

# Selected indicators for vocational training

How many young people were able to conclude a training contract, and how many were unable to obtain the apprenticeship they desired? How high is the rate of company participation in training? The following section will introduce two indicators which are closely connected with the debate surrounding training place market issues: the supply and demand relation and the rate of training provision by companies.

### SUPPLY AND DEMAND RELATION

Since the first Report on Vocational Education and Training in 1977, reporting has taken place on an annual basis on the number of newly concluded training contracts and on the supply of and demand for training places. The main data foundations in this regard are the BIBB survey as of 30 September each year (cf. box) and the training market statistics produced by the Federal Employment Agency (BA).

### BIBB survey as of 30 September

The BIBB survey as of 30 September is conducted on the basis of the Vocational Training Act (BBiG) each year and takes place in conjunction with the competent bodies for vocational education and training. The survey takes account of all training contracts newly concluded between 1 October of the previous year and 30 September of the present year and not prematurely dissolved.

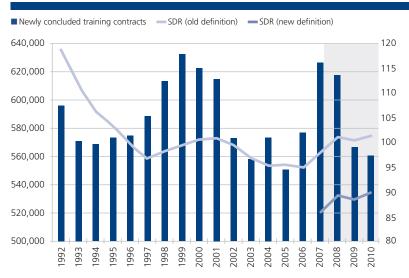
Results available at http://www.bibb.de/de/14492.htm (German language resource)

This information forms the basis for the calculation of the supply and demand relation, as an indicator for the situation on the training places market. This involves expressing the number of training places available as a ratio per 100 persons seeking a training place.

- Training place supply is made up of the number of newly concluded training contracts (560,073 in 2010) plus the training places made available for placement through the BA but still vacant as of 30 September (19,605 in 2010).
- Training place demand is defined as the sum of newly concluded training contracts plus those still seeking a training place at the BA on 30 September.

Figure 1 shows that around 595,000 training contracts were concluded in 1992 and that the second highest result

Figure 1 Newly concluded training contracts and the supply and demand relation (SDR)



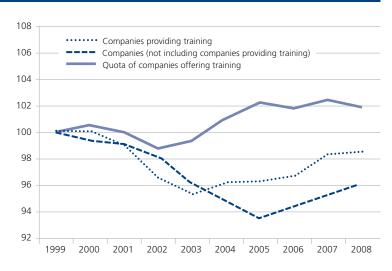
Source: BIBB survey of newly concluded training contracts as of 30 September; Federal Employment Agency training market results as of 30 September

following German reunification was achieved in 2007. If the usual (traditional) method of calculating the supply and demand relation is applied to the overall figures since the beginning of VET reporting, a significant surplus supply of training places is shown still to have existed at the beginning of the 1990s. Despite higher levels of contracts concluded around the year 2000, this surplus was very much reduced around that time. As of 2007 the (traditionally calculated) supply and demand relation is on the rise once more.

Notwithstanding this, a significant factor for the results and their interpretation is who is deemed to be counted among the persons still seeking a training place on 30 September (cf. Krekel/Ulrich 2006). The supply and demand relation as hitherto calculated included only "unplaced" training-place applicants (12,255 in 2010). The extended definition of the supply and demand relation, however, also encompasses applicants who were in alternative provision as of 30 September (e. g. continued attendance at school, work experience, introductory training) but were still seeking a training place for the current year (72,342 in 2010).

Whereas the supply and demand relation as traditionally calculated tends to indicate a balanced training market provision, the extended definition highlights the quantitative imbalance between training supply and demand (cf.

Figure 2 **Development of company participation in training in Germany between 1999 and 2008** (stated in %, 1999 = 100)



Source: company statistics provided by the Federal Employment Agency, BIBB calculations

BMBF 2011 and BIBB 2011). Notwithstanding this, both curves indicate a rising tendency from 2007 onwards.

### RATE OF TRAINING PROVISION BY COMPANIES

The rate of training provision by companies also acts as a central annual reporting indicator in providing information on the situation on the training places market. The rate of companies offering training is based on the company statistics of the Federal Employment Agency (BA) and states companies with trainees as a percentage of all companies (including companies providing training). Data relates in each case to the previous training year.

In 2008, around 490,000 or 24 per cent of all companies participated in the initial vocational education and training of young people. This represents a slight fall in the rate of companies offering training as compared with 2007. Nevertheless, the rate of companies offering training has improved by two per cent since 1999 and only failed to reach the 1999 level in the years 2002 and 2003 (cf. Figure 2). Although the rate of companies offering training has risen, the total numbers of both companies (not including companies providing training) and companies offering training have fallen since 1999, although the latter have not decreased in quite such high numbers as the former.

Although the rate of companies offering training is a central indicator of company participation in training, it neglects the fact that not all companies are entitled to provide training (cf. Stegmaier 2010) and does not take account of the circumstance that not all companies participate in training on a continuous basis (cf. Troltsch 2010).

### Outlook

The "clear separation" of the previous Report on Vocational Education and Training into a policy section forming the object of consultation and resolution by the Federal Government (cf. BIBB Hauptausschuss 2008, p. 2) and a Data Report published by BIBB to accompany the Report on Vocational Education and Training has met with a positive response from the social partners, the academic research community and VET practitioners.

The Data Report's clear indicators-based structure has already established it as a standard vocational education and training work in Germany. The aim now is to continue to develop the basis which has been created and to pursue ongoing enhancement of the indicators system, the (measurement) instruments and the analytical methods employed. Account must also be taken of externally dictated contextual factors such as the National Education Report and developments within the international context and at a European level in particular. Alongside central indicators

<sup>4</sup> As of 2009, the statistic additionally includes applicants to authorised government providers. Accordingly, comparison with the previous year is possible only to a limited extent. Information on vacant training places at authorised local government providers is not presently available.

relating to initial and continuing training, the reporting system will continue to include special topics of focus which will change each year and will be addressed both in the Report on Vocational Education and Training and in the Data Report in equal measure. As a result of the current debate centring on the modernisation of the educational system and transitions between various educational sectors, the topic chosen for the year 2011 is "permeability".

As the Data Report continues to develop, however, it is important not to lose sight of the overall size of the work. It currently comprises some 400 pages, and this is a level which should not be exceeded. In order to address further topics, the individual articles will need to concentrate on the most important indicators in future. Furthermore, greater use will be made of the existing practice of transferring information onto the BIBB Internet portal. Such an approach ensures that all the essential information on the development of vocational education and training is made available via the Data Report accompanying the Report on Vocational Education and Training.

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