



Education in Germany

An indicator-based report
including an analysis of education and migration

Summary of important results

On behalf of the Standing Conference of the Ministers of Education
and Cultural Affairs of the Länder in the Federal Republic of Germany
and the Federal Ministry of Education and Research



Bundesministerium
für Bildung
und Forschung



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The report „Education in Germany“ is the first major empirical review which covers the entire German education system. It provides information about the general conditions, features, results and output of education processes. The report analyses the entire institutional structure of the education system from early childhood education and school education to vocational training, higher education and adult education. It was commissioned jointly by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK) and the Federal Ministry of Education and Research (BMBF). The report was drawn up by a consortium whose members include the German Institute for International Educational Research (DIPF), the German Youth Institute (DJI), the Higher Education Information System (HIS), the Sociological Research Institute at the University of Göttingen (SOFI) as well as the Federal Statistical Office and the statistical offices of the *Länder*; the chief responsibility lay with the DIPF.

As a data-based, problem-centred analysis of the German education system, the report does not include assessments and recommendations. What is special about this report is that it is mainly based on selected indicators, i. e. on statistical parameters, each of which represents a central feature of education processes or a central aspect of education quality. These indicators have

been derived from official data and representative social surveys; wherever possible, they are embedded in the context of developments in the past years and decades, broken down by German *Länder* and compared internationally. The report aims to meet high standards regarding the quality and reliability of the data material used. This means, however, that it only covers current problems of educational development to the extent that reliable data are available.

This report is the first volume of a permanent series of education reports, which will in future be published every two years on the basis of official statistics and additional, nationally representative survey and panel data and which will provide information on the different sectors of the education system and thus guidance for further development. The reports will present a permanent set of core indicators in order to guarantee the consistency of educational reporting and to enable a comparison between data referring to different time periods. Regular updating makes the reports specifically informative; in addition, future reports will include further indicators on varying topics. An interpretation of the figures helps readers understand the development of the education system, identify its strengths and weaknesses and compare system performance at national and international level and thus enables them to see where political action is required.

Bibliographical details:

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Chapter A: The Impact of Changing General Conditions

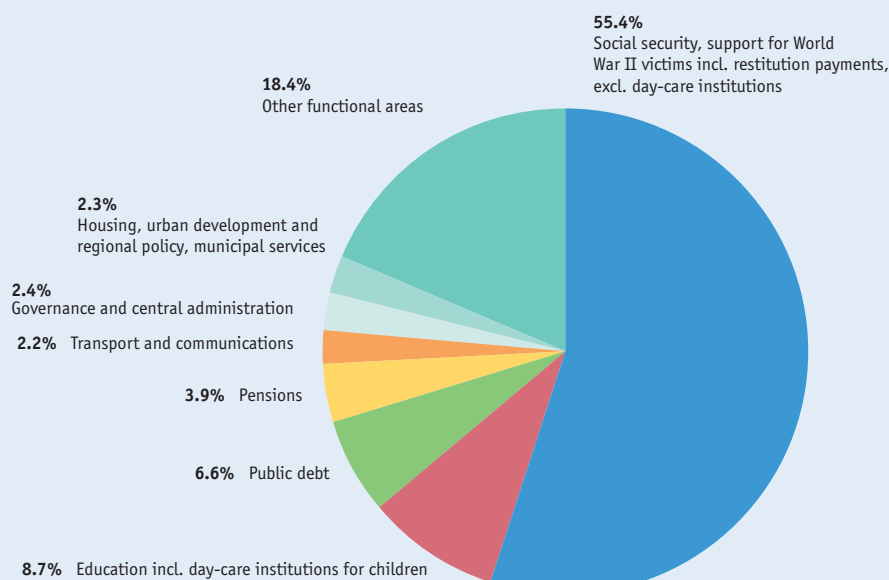
Declining demographic trend

Particularly the increasing life expectancy together with a persistent low birth rate require the education system to make major efforts to adapt to the changed situation. It is to be expected that the group of people under 20 years of age will account for a mere 17 % of the population in 2030. Today's school sector already shows how difficult it is to continue to maintain an educational infrastructure which is able to offer courses close to learners' homes. Furthermore, institutional arrangements for lifelong learning are important for making better use of the educational potential of all age groups and for securing industry's innovative capacity.

Increasingly tight public budgets

The education sector's funding requirement must be met by public budgets, which are also facing increasing demands in other sectors. Public spending on social security today is already six times the amount spent on education (cf. Figure A3-1). In addition, the *Länder* budgets, which contribute an important share to public spending on education, are becoming less flexible as pension payments will be increasing by 70 % between 2003 and 2030.

Figure A3-1: Structure of the overall public budget 2003 (in %)



Source: Federal Statistical Office Germany

Structural change from service to knowledge society

Structural change has an impact on the employment structure in Germany too: In 2004, 71 % of the working population were employed in the services sector. Almost half of these people work in the knowledge and information sector or in the personal services industry. Together with the growing internationalization of the labour markets, this has made new skills profiles increasingly important. All sectors of education must create the cognitive and motivational prerequisites for the development of such profiles.

Increasingly diverse life patterns

Furthermore, the education system must respond to changes in family and life patterns and the increase in (part-time) employment of mothers, e. g. by extending all-day school programmes.

Chapter B: Basic Information on Education in Germany

B

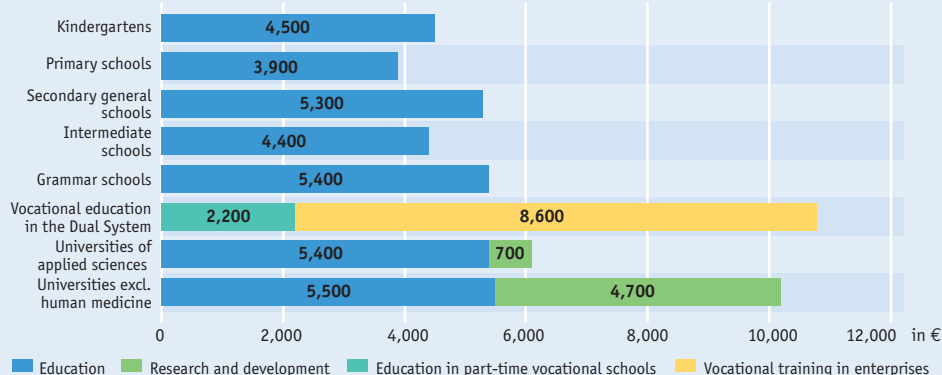
Educational expenditure as a percentage of the GDP is decreasing

Educational expenditure as a percentage of the GDP has been decreasing for years. OECD data for 2002 based on economic performance show that Germany, with a GDP share of 5.3 %, spends less on education institutions than other OECD member countries (OECD average: 5.7 %). However, the expenditure per student nearly equals the OECD average. A comparison with other OECD countries and a comparison of the German *Länder* reveal major differences between the individual sectors of education as regards their funding equipment. It can be noted that the annual expenditure per learner in the dual system of vocational education and training in 2003 was Euro 10,800, which is almost double the amount spent by universities (without human medicine) on teaching per student (Euro 5,500).

Strong increase in the level of qualification of the population

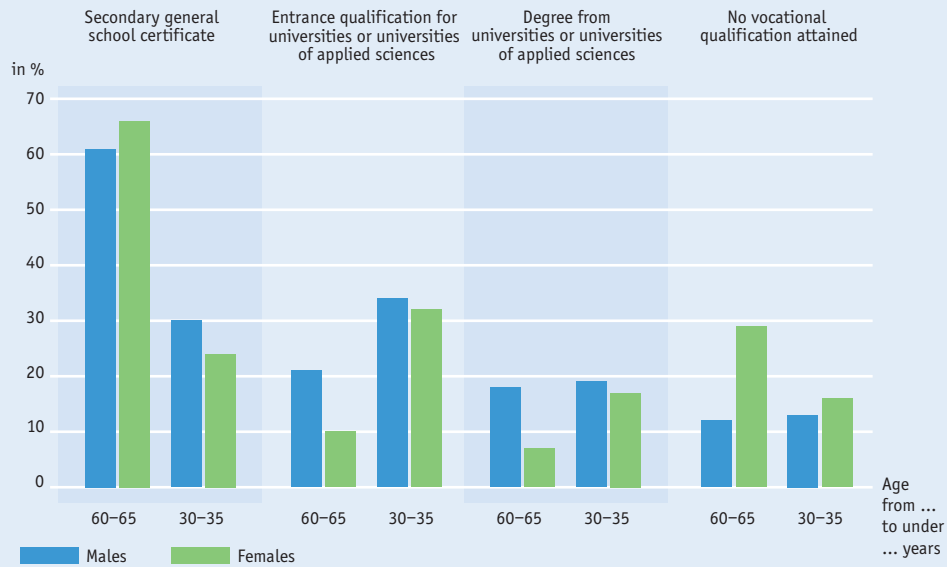
Just like their participation in education, people's level of educational attainment and qualification increased over the past decades: There was a marked increase in intermediate (Realschule) school leaving certificates and higher education entrance qualifications and a somewhat less marked increase in university degrees. A comparison of the group aged 60 to under 65 with people aged 30 to under 35 shows that the number of 30- to 35-year-olds who have acquired higher education entrance qualifications (32.9 %) is about double the number of 60- to 65-year-olds with such qualifications (15.5 %). On the other hand, a decrease is shown in secondary general (Hauptschule) leaving certificates. It can be noted that women have made increasing educational efforts so that their qualification level has reached that of men, and is even higher in some cases. There are still striking

Figure B1-3: Expenditure per student in selected educational institutions 2003 (in euros)



Source: Federal Statistical Office Germany

Figure B3-2: Male and female population 2004 by age groups and selected levels of qualification attained (in %)



Source: Federal Statistical Office Germany, Microcensus

differences in educational attainment in East and West Germany: a larger number of people with vocational qualifications in the East German *Länder* and a larger number of people with higher education entrance qualifications in the West German *Länder*. The rate of people without completed vocational training remains high. In 2004, 14.5 % of men and 17.3 % of women between 30 and 35 were without final vocational qualifications.

Chapter C: Early Childhood Education

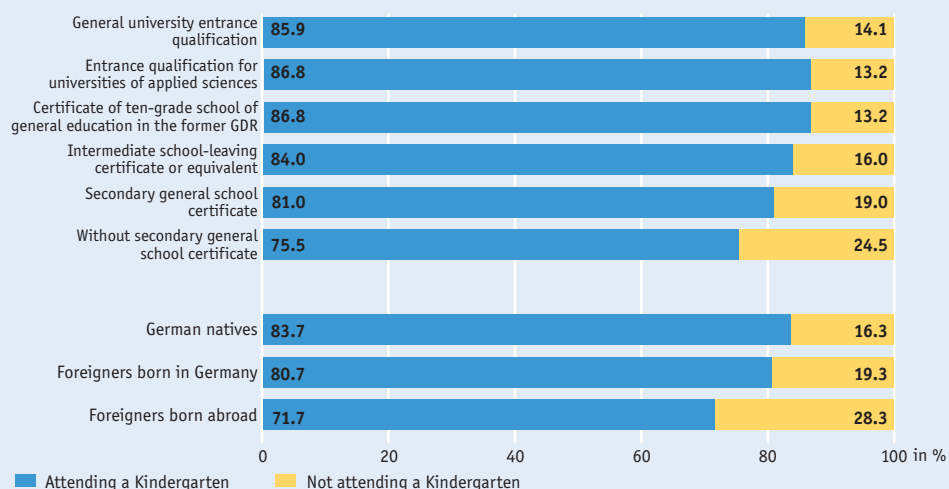
High rates of care provision for children from age three up to school entry, enormous differences between East and West for creche-age children

The number of Kindergarten places has seen a considerable increase in West Germany mainly because people have been entitled to Kindergarten places since the mid 1990s; today at least part-time care is provided all over Germany for almost all children between 3 and 6.5 years of age. However, enormous differences can still be noted between East and West Germany as regards the provision of all-day care with lunch. The share of all-day care in all Kindergarten places in 2002 was 98 % in the East German *Länder* (excluding Berlin) and 24 % in the West German *Länder* (excluding Hamburg and Bremen). The provision of places for the under three-year-olds shows even greater differences. Whereas places for 37 % of children in this age group were offered in the East German *Länder* excluding Berlin in 2004, the corresponding rate for West Germany was less than 3 %.

The Kindergarten – a widely used institution

Kindergarten has become a regular part of the educational biography of children in Germany; approximately 90 % of all children between the age of four and school entry are attending Kindergarten. Nevertheless, the age of entry into Kindergarten varies greatly between East and West. In the East German *Länder* excluding Berlin, 44 % of the one to two-year-olds, 72 % of the two to three-year-olds and 83 % of the three to four-year-olds

Figure C2-3: Participation rates in Kindergartens from the age of three until school entry 2004 by level of general school education of the parent and nationality of the child (in %)



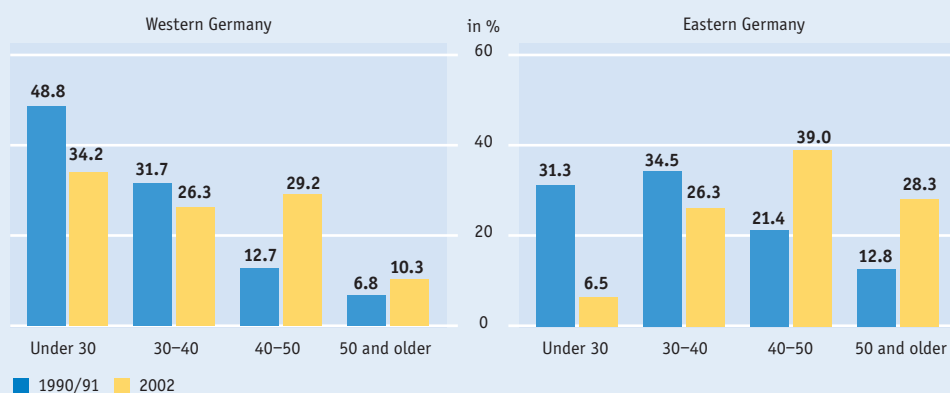
Source: Federal Statistical Office Germany, Microcensus

are attending child-care facilities; the respective percentages for the West German *Länder* excluding Hamburg and Bremen are 5 %, 18 % and 69 %. Almost the same percentages of Kindergarten attendance in East and West (88 % and 87 %) can be noted with children aged four and older. Participation in Kindergarten programmes also depends on children’s social background. While participation is generally high, it is lower for children whose parents have attained lower levels of qualification and for young foreigners born abroad (cf. Figure C2-3). It is therefore a major challenge to provide incentives for these groups in order to ensure that early childhood education reaches most of these children at an early age.

More than half of the teaching staff work part-time and the percentage of older staff is increasing

Recent years have seen a strong increase in the percentage of part-time staff. In 2002, it was 80 % in East Germany and 49 % in West Germany. The number of fixed-term contracts has also increased. It must be assumed that a high degree of part-time employment and staff turnover will have an impact on the quality of teaching. While the percentage of older teaching staff has been increasing considerably in both parts of Germany since German reunification, a particularly strong increase can be noted in East Germany, where mainly young teachers were affected by the staff cuts required in response to declining birthrates (cf. Figure C3-2). Owing to this age structure, East Germany will for the first time again need new staff in the years ahead. Most of the staff are trained Kindergarten teachers. A comparison with staff in other educational institutions shows that only a very small number of Kindergarten teachers – a mere 2 % for Germany as a whole – have obtained higher education qualifications.

Figure C3-2: Pedagogical staff in Western Germany and Eastern Germany* 1990/91 and 2002 by age groups (in %)



* Western Germany: incl. Berlin, 1990 excl. East Berlin; Eastern Germany: excl. Berlin, 1991 incl. East Berlin
 Source: Federal Statistical Office Germany, Statistics on children’s and youth welfare, own calculations

Increasingly flexible transition to school

Formerly, compulsory education started at age six in all German *Länder*. Earlier school entry was the exception, deferred entry relatively frequent. This trend has been reversing in recent years, and the number of early school entries in 2002 was for the first time higher than the number of deferrals. However, this affects only a small number of children. School entry at the age of six is the rule for 85 % of the children concerned. Nevertheless, the *Länder* have introduced new different school entry stages which are to provide for greater flexibility in the transition to school and to prepare the ground for an earlier start of compulsory education.

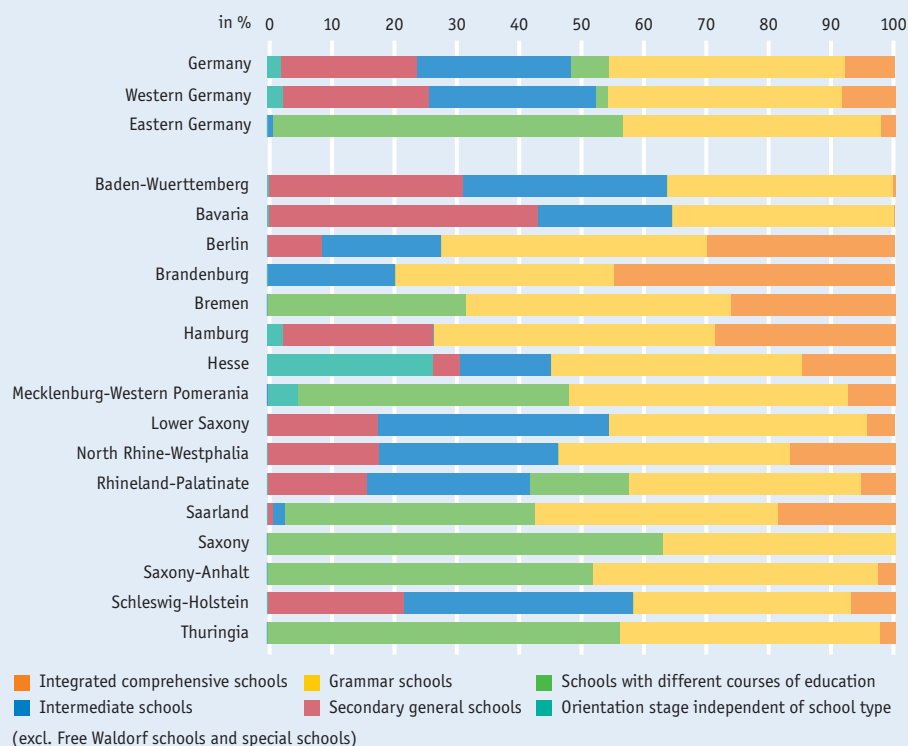
Chapter D: School Education and School-Age Non-Formal Learning

Various transitions in the German school system and related social inequalities

The educational biographies of children and young people in Germany are characterized by numerous transitions. These transitions occur at the interfaces in the German school system; in most cases, they start after the fourth grade and often set the direction for further educational careers. The various transitions are mainly the result of diversity in the lower secondary sector, where between two and five school types are offered in the different *Länder*. In some cases there are considerable differences between the *Länder* as regards the attendance of the existing school types (cf. Figure D1-2).

While a specific type of school must be chosen at an early age, it is possible to correct this choice later in life because the German school system allows transfer between different educational pathways. However, most of these transfers are top-down, from school types offering higher qualifications to those providing less high levels. Whereas each top-

Figure D1-2: Distribution of students* across school types in school year 2004/05 by Land (in %)



* Refers to students who attended primary school (4th grade) in the preceding school year. For Berlin and Brandenburg the transition from 6th to 7th grade is shown. The calculations for Germany and Eastern Germany do not include these Länder. For Hamburg the distribution of students across school types in the 5th grade is used instead of transition rates.

Source: Federal Statistical Office Germany, School statistics 2004/05

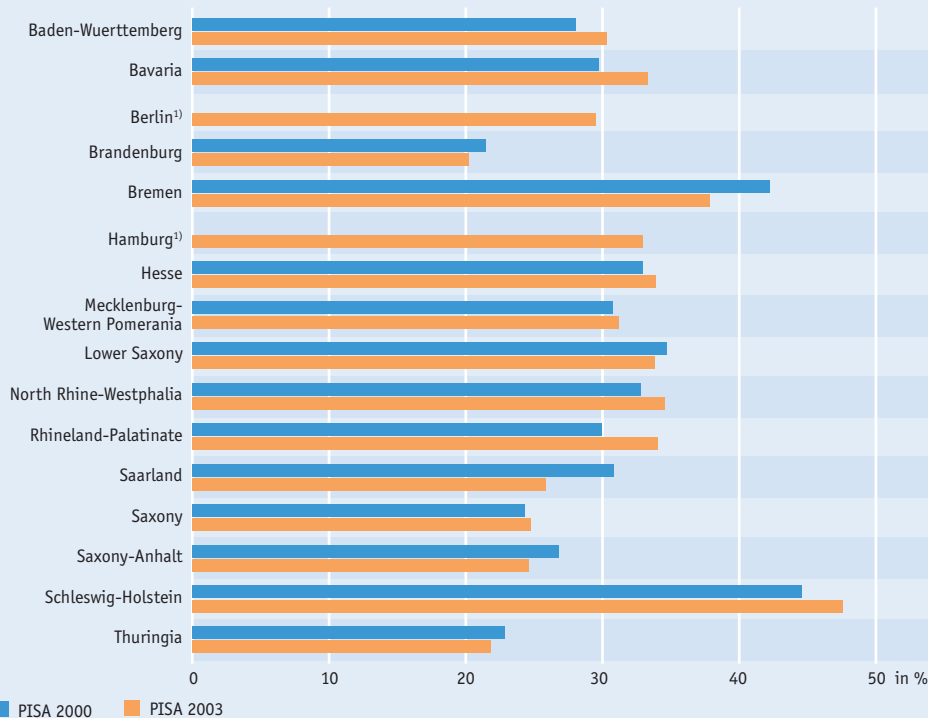
down transfer is still matched by one bottom-up transfer to a more highly qualifying school type in the East German *Länder*, the ratio is almost 4:1 in the West German *Länder*. School students from the lower social strata, above all those with a migration background, are at a disadvantage in such transfers. It is not only more difficult for them to transfer to a more highly qualifying school but they also fail more frequently to complete education there.

Although a growing number of school students benefit from an inclusive learning approach, the proportion of those who transfer to a special school (*Förderschule*) has been continuously increasing in recent years. Today, one in twenty school students participates in special needs programmes. Mainly hard-to-reach children from families with low educational achievement are at increased risk of having to transfer to a special school. The number of students who transfer from standard school types to special schools is five times the number of students returning to mainstream education; it should, however, be noted that returning is not always possible due to the students' special educational needs.

High percentage of students with delayed school careers

Although the multi-track German school system aims at homogeneous performance profiles within the learning groups, between 20 % and 45 % of German school students – depending on the *Land* concerned – show delayed school careers due to late school entry and/or repetition of classes (cf. Figure D2-2).

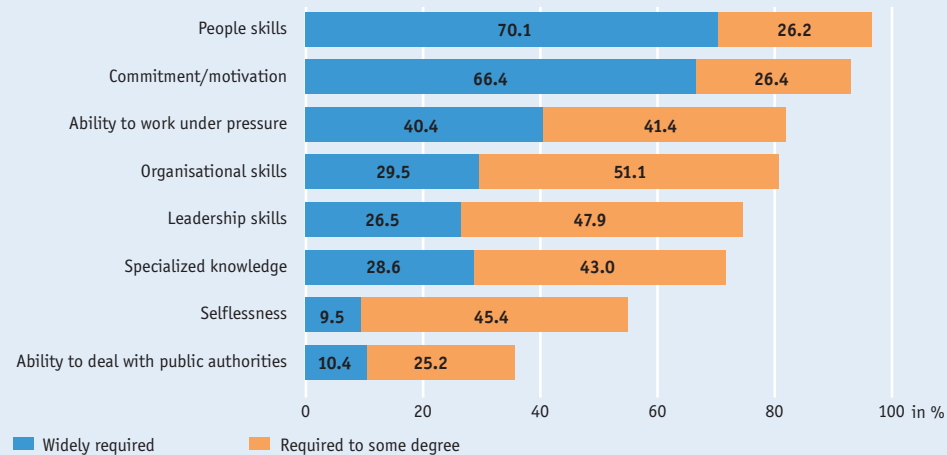
Figure D2-2: 15-year-old students with delayed school careers 2000 and 2003 by Land (in %)



1) Results are missing because of insufficient participation in PISA 2000.

Source: Deutsches PISA-Konsortium (2001), PISA 2000, Opladen, p. 205 ff.; PISA-Konsortium Deutschland (2005), PISA 2003, Münster, p. 169 ff.

Figure D5-2: Demands in the context of voluntary activities according to self-reports of 14- to 19-year-olds 2004 (in %)



Source: Freiwilligensurvey 2004, Question B1_12; own calculations

In some *Länder*, children with a migration background account for double the amount of delayed school careers than children without a migration background. It must be doubted whether repeating classes is of any benefit because, in addition to prolonged periods of schooling and related costs, the students who have repeated a class nevertheless show significant performance shortfalls compared with their fellow students.

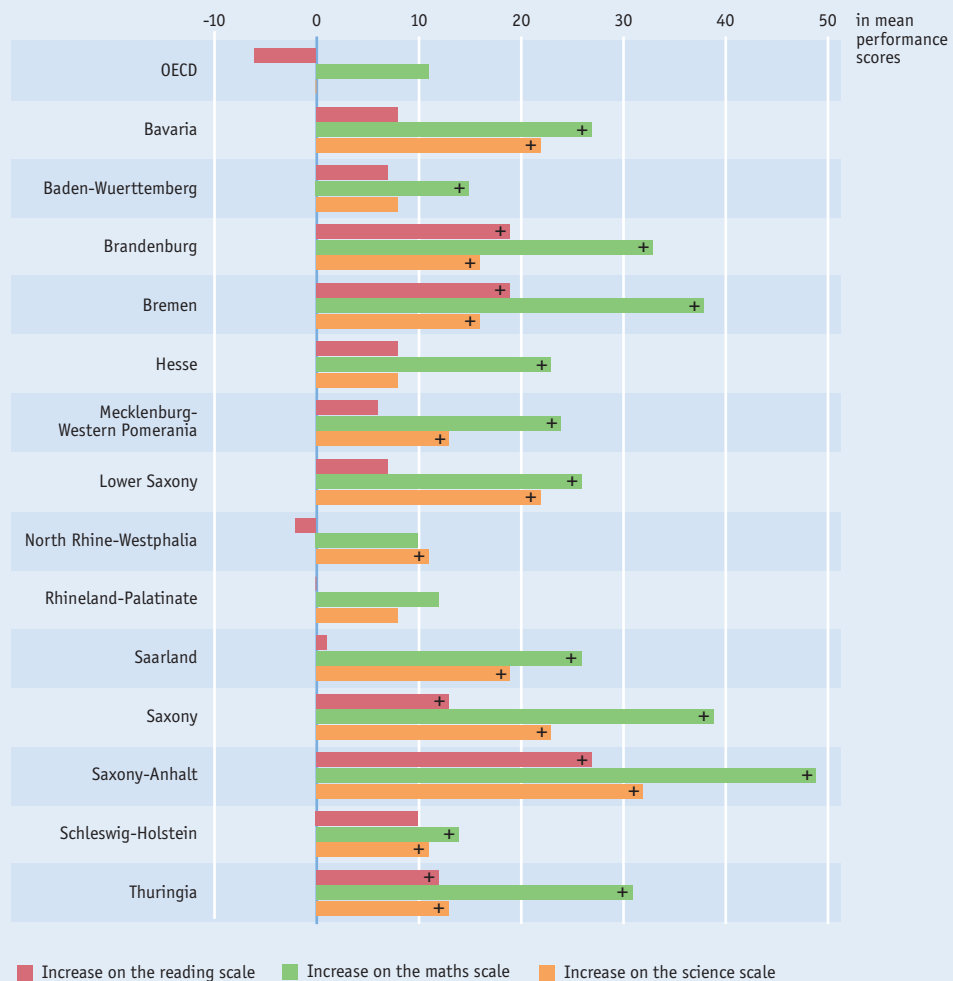
Marked increase in the provision of all-day schooling

All-day programmes for school-age children have been considerably increased in recent years. Between 2002 and 2004, the number of all-day school programmes increased by 38 %. Today, almost 25 % of all schools offer all-day programmes. While participation in all-day programmes is usually binding for all children at integrated comprehensive schools and special schools, “open” provision of all-day programmes for children who wish to participate is most frequent at other school types. Primary schools often cooperate with after-school care centres when offering all-day programmes.

Computer skills are mainly acquired through use of computers outside school

In Germany, children and young people learn how to handle computers and the Internet mostly outside school. Whereas on OECD average, 26 % of school students say that they owe most of their computer skills to school education, only half that number say so in Germany. Thus children’s computer skills and the use of computers strongly depend on their family background. A relatively high number of school students of low social status (22 %) say that school has been the most important place for them to acquire skills in this field, but these young people in fact have the lowest computer skills compared with other young people.

Figure D6-2: Changes in subject performance between 2000 and 2003 by literacy areas and Land* and at OECD level (in mean performance scores)



* Significant increases are marked with "+". No information on Berlin and Hamburg because of insufficient participation in PISA 2000. The increase on the maths scale refers to the subdimension "Change and relationships".
Source: PISA-Konsortium Deutschland (2005), PISA 2003, Münster, especially p. 378

Voluntary activities require and promote practical everyday skills more strongly than specialist knowledge

Voluntary activities offer young people an opportunity to acquire and develop their skills in informal learning processes. Young people frequently assume social responsibility mainly in the areas of sport/physical activity, school/Kindergarten and church/religion; in addition to participating in community activities, they engage in organizational functions and tasks (e.g. by working as voluntary coaches). In so doing, young people learn that above all people skills, great commitment and the ability to work under pressure are required. Specialist knowledge is of lesser importance (cf. Figure D5-2). Disadvantages due to social origin can also be noted in this important area of informal learning. Mainly students at school types which provide higher qualifications engage in voluntary

activities. General school students, whose families are usually at a social disadvantage, and students at comprehensive and special schools are less often involved in such out-of-school learning contexts.

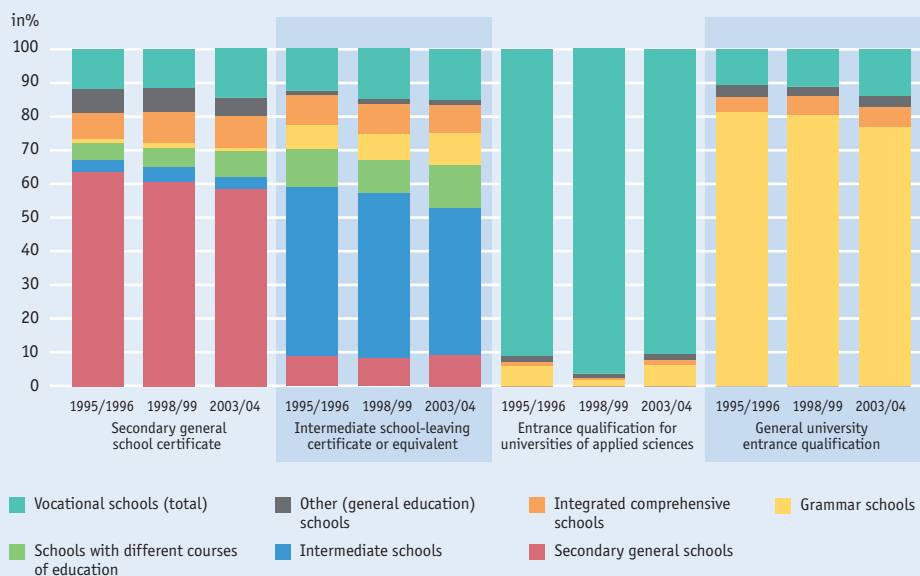
Slight increases in cognitive skills between PISA 2000 and PISA 2003

Between 2000 and 2003, most of the German *Länder* saw slight increases in the skill level and development of school students (cf. Figure D6-2), though only with regard to some specific skills and in the high-performing school types. An international comparison shows that Germany's problems mainly lie in the lower achievement range; the skills of the lowest achieving 10 % of school students are far below the attainment of their counterparts in other countries. On the other hand, the top 10 % of high achievers in Germany are in the upper average range of all countries. Germany is still among the countries where school performance is closely linked to the students' social background; the social gradients do, however, vary between the different *Länder*: Bremen shows the lowest performance scores while students' achievement there depends strongly on their social status. Bavaria, on the other hand, was able to secure a high average performance level while keeping linkage between social background and reading skills at a relatively low level.

Marked differences in school-leaving certificates by gender and background and decreasing linkage between school type and final school qualifications

On the one hand, female school-leavers obtain higher qualifications than male school-leavers; on the other hand, girls leaving school without final qualifications account for

Figure D7-3: School-leaving certificates obtained in schools of general and vocational education by type of qualification, school type and year of school-leaving (in % of the obtained certificates)



Source: Federal Statistical Office Germany, School statistics 1996/97, 1999/00, 2004/05

about 6 % of the respective age groups in the population, which is only half the percentage of boys without leaving certificates. The total number of foreigners leaving school without final qualifications is double the number of German school-leavers without final certificates. This percentage is particularly high for male foreigners, where 20 % of an age group leave school without final qualifications.

Certificates are no longer tied to specific school types but can be acquired in many different ways. School type and final qualifications are increasingly being delinked, which is shown in particular by the increasing number of general school certificates acquired in the system of vocational training (cf. Figure D7-3).

Chapter E: Vocational Training

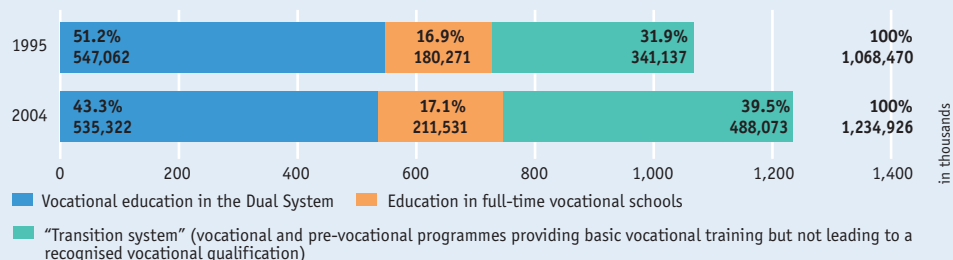
Growing uncertainties for young people transferring to qualified vocational training

The number of new entrants in vocational training increased by approximately one seventh to 1.24 million between 1995 and 2004. The increases in the three subsystems of vocational training (dual system, full-time vocational schools, transition system) differ greatly. Between 1995 and 2004, the share of training contracts under the dual system decreased by eight percentage points while the number of new entrants in the transition system increased by about the same extent and the share of full-time vocational schooling remained almost unchanged. The structural shifts between the three subsystems over the past ten years reveal the growing difficulties which young people are facing in the transition from school to vocational training or employment. The programmes of the transition system do not lead to recognized final qualifications but at best to the improvement of individual skills as a basis for entering a training course. The number of young people in this segment increased by 147,000 (that is, by 43 %) to just under half a million over the past ten years. Not much is known about the impact of the transition system – whether it actually leads to qualified training or rather serves as a means to bridge waiting periods.

Secondary general school certificates increasingly being devalued

In the short period between 2000 and 2004, the number of holders of secondary general school certificates who managed to obtain a training place in the dual system decreased from 47 % to 40 % while the share of new entrants to the transition system increased from 45 % to approx. 52 %. One in two school leavers with a secondary general school certificate

Figure E1-1 (excerpt): Distribution of new entrants* across sub-systems of vocational education 1995 and 2004**

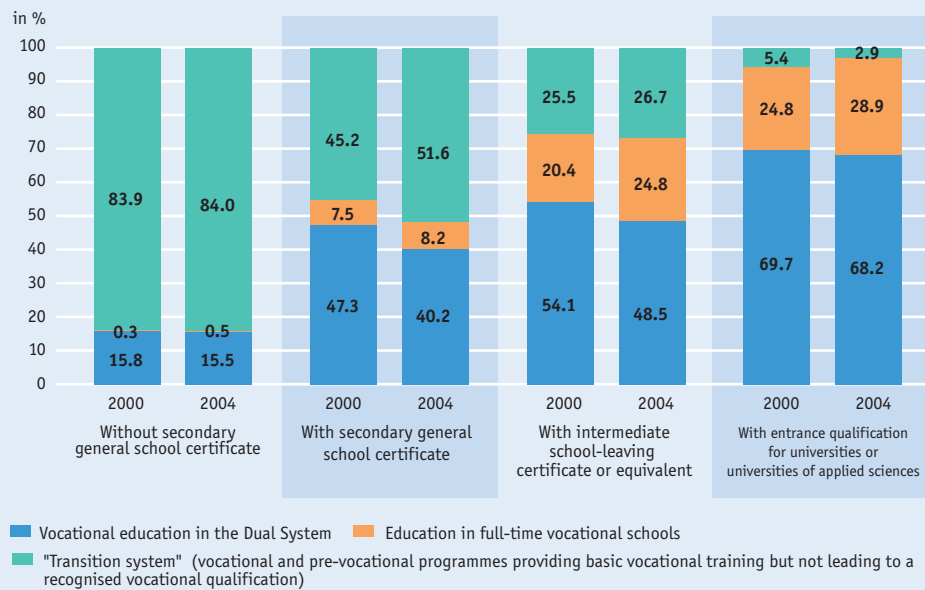


* Partially defined as students enrolled in the first year of the programme; for programmes of the Federal Employment Agency: reference date 31 December.

** Excl. health-sector schools in Hesse

Source: Federal Statistical Office Germany and the statistical offices of the Länder, own calculations and estimates on the basis of school statistics; Federal Employment Agency, own calculations

Figure E1-3: Distribution of new entrants* across the three sub-systems of vocational education by type of general education qualification obtained*** 2000 and 2004 (in %)**



* Partially defined as students enrolled in the first year of the programme

** Excl. new entrants with other certificates

*** Excl. health-sector schools in Hesse

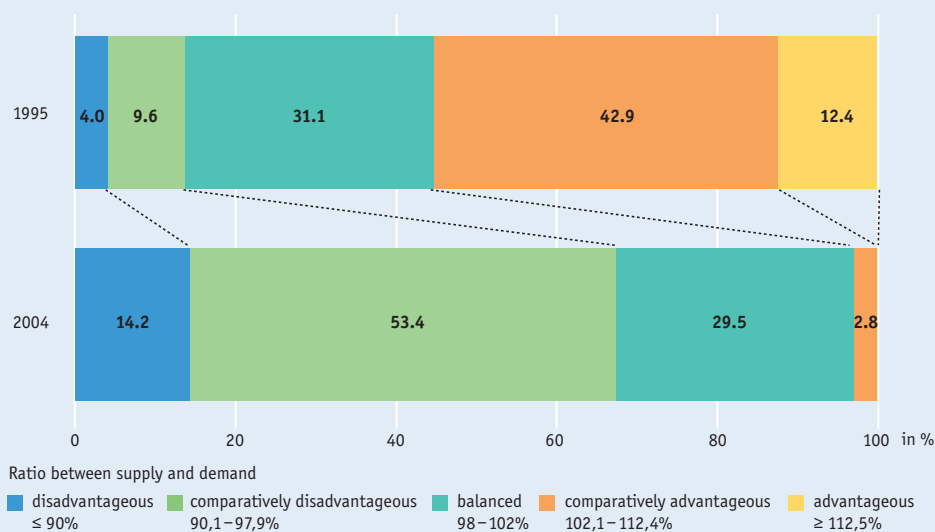
Source: Federal Statistical Office Germany and the statistical offices of the Länder, own calculations and estimates on the basis of school statistics; Federal Employment Agency, own calculations

and one in four with an intermediate school-leaving certificate participate in school-based or prevocational training programmes before entering the dual system. Young people without a secondary general school certificate have hardly any chance to get a training place – only 16 % of them actually enter vocational training. One of the major traditional strengths of the dual system of vocational training, namely its potential to integrate children from less education-oriented social groups into the world of work by equipping them with vocational qualifications, is thus called into question.

Regional disparities in the supply with training places in the dual system

The national imbalance which has been existing for years between the supply of training places and the demand for such places shows great regional disparities. The regions which are undersupplied with company training places have markedly expanded over the last ten years: While in 1995, 55 % of the 177 employment agency districts still showed an advantageous or comparatively advantageous supply/demand ratio, this share had decreased to 3 % by 2004. On the other hand, the number of districts with a disadvantageous or comparatively disadvantageous supply/demand ratio increased from 14 % to 67 % over the same period. This development can limit career choice for an increasing number of young people and may, in the medium term, lead to skills shortages in the regions concerned.

Figure E2-2: Training place situation in the Dual System in employment agency districts as measured by the ratio between supply and demand 1995 and 2004 (in %)



Source: Based on the German Reports on Vocational Education and Training for the years 1996 and 2005, own calculations

Stable training and training employers rate – but decrease in the supply of training places

Despite a stable training rate (number of trainees per 100 employees subject to social insurance) and despite a stable training employers rate (number of companies offering training per 100 companies e.g. in a specific branch of industry), the supply of training places is on the decrease, which means that it follows structural developments in the reduction of jobs and companies. It seems to be less related to employers' willingness to offer training places.

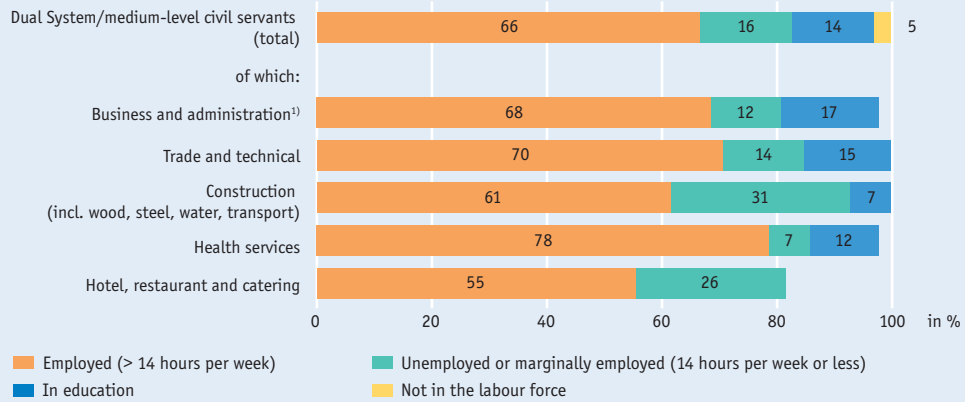
Major differences between occupational areas in the rate of termination of training contracts

The termination of training contracts leads to uncertainty and loss of efficiency for trainees and companies but the extent to which the different occupational areas are affected varies greatly. The rates of termination are highest in the hotel and catering trade while the lowest rates are found in industrial and some commercial occupations.

Increasing difficulties in the transition to employment

Direct transition of training graduates to regular employment in their training companies is among the main strengths of the dual system. But the company practice of employment after completion of training has somewhat changed over the past decades. Between 2000 and 2004, the overall transition rate decreased by five percentage points. The greatest decrease (over ten percentage points) is found in very small businesses (one to nine employees) and in the biggest companies (with a labour force of over 500).

Figure based on Table E5-1: Work status 2004 of vocational training graduates of the years 2001 to 2003*



* Deviations from 100% are the result of small cell frequencies for persons not in the labour force.

1) Incl. finance and accounting.

Source: Federal Statistical Office Germany, Microcensus 2004, own calculations

E

The difficulties in making the transition to employment are reflected by the employment and unemployment rates, which vary considerably for the different subjects of training. In 2004, the rate of employment for the training graduates of the three previous years was 78 % in the health occupations and 70 % in industrial occupations while it was a mere 55 % in the catering trade and 61 % in the construction trade. With 26 % and 31 % respectively, the latter two areas also have the highest unemployment rates.

Chapter F: Higher Education

Higher education system undergoing fundamental change

German institutions of higher education are currently in the process of fundamental change. The study reform following the Bologna Process, the increasing differentiation within the higher education system (Initiative for Excellence) and the new management and control procedures which are being introduced to strengthen autonomy and self-direction will result in major changes in the universities. The Report on Education takes a look at major conditions under which these reforms will take place. The focus is on quantitative trends.

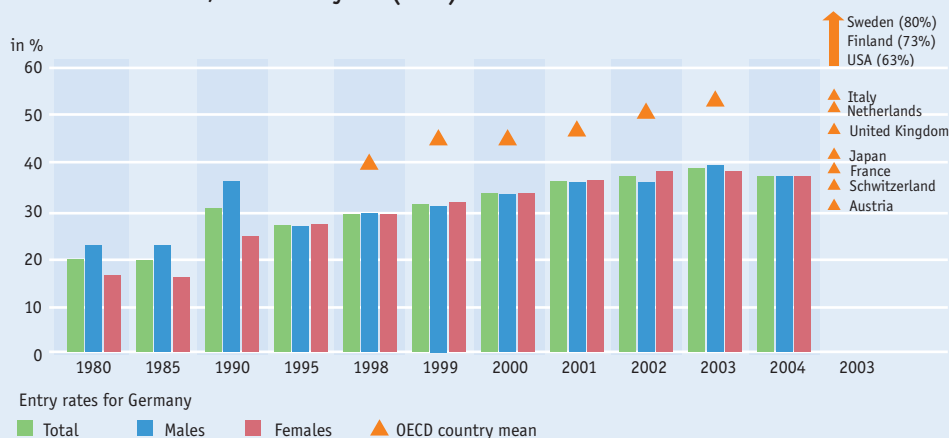
Development of the demand for higher education

Demand for higher education studies has been massively increasing in recent years. But internationally it is still below the OECD average (cf. Figure F2-1). The number of student entries increased by approx. 100,000 to almost 360,000 between 1995 and 2005. Entry rates are currently stagnating, but further increases are to be expected, also as a result of shorter periods of secondary education at grammar schools in several *Länder*.

Growing number of women students

The great demand for higher education studies is mainly due to the increasing number of young women enrolling in higher education courses (cf. Figure F2-1). But not all subjects benefit from women's interest in academic studies to the same extent. The engineering sciences, physics and computer science in particular are less successful in attracting the potential of female students.

Figure F2-1: Higher education entry rates 1980 to 2004, for 2003 in comparison to selected OECD countries, total and by sex (in %)



Source: Federal Statistical Office Germany, Statistics of higher education; OECD, Education at a Glance 2005

Growing internationalization

Higher education is becoming increasingly international. One in six new entrants was of foreign origin in 2004.

Student dropout is a weak point

The relatively long duration of studies and the high dropout rates reveal that study success is still a weak point of the higher education system. But the indicators show initial signs of improvement. For example, the dropout rate at universities of applied sciences fell from 22 % to 17 % between 2002 and 2004.

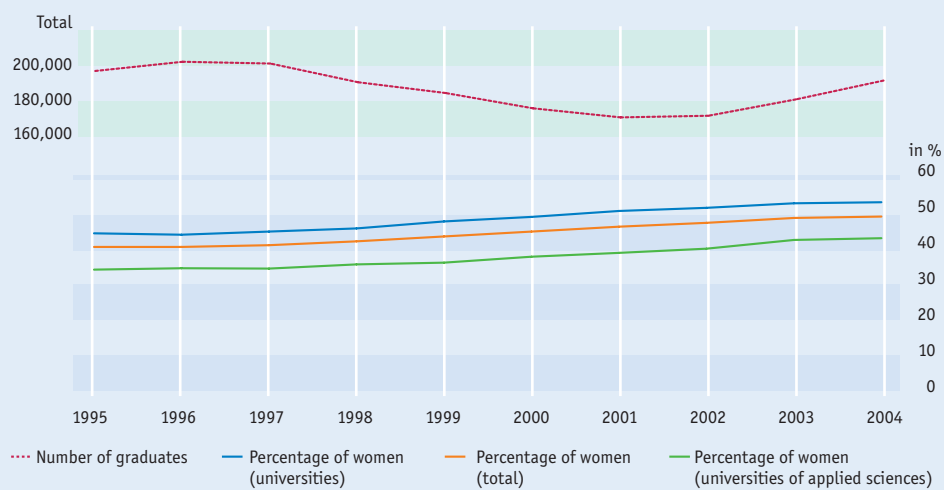
Increasing number of higher education graduates

After a major decrease at the end of the 1990s, the number of higher education graduates has again been increasing since 2001. This positive development is mainly due to the increasing number of female graduates, who now account for over 50 % of the total number of university graduates (cf. Figure F4-1). Most university graduates manage to transfer quickly to working life but some differences can be noted between the various subjects.

Women's growing share in the academic labour force as a future challenge

The four indicators presented for the higher education area reveal the following general trend: The percentages of women entrants and of female graduates are increasing; women are often more successful than men not only at school but also in higher education. The labour market and the employment system must therefore prepare for the future, when the greater part of the academically qualified labour force will be young women. Family policy, in particular the reconciliation of work/studies and family duties, will be of key importance in securing an adequate future supply of highly qualified labour.

Figure F4-1: Number of first-time graduates and percentage of women 1995 to 2005 (in %)



Source: Federal Statistical Office Germany, Statistics of higher education

Chapter G: Adult Education

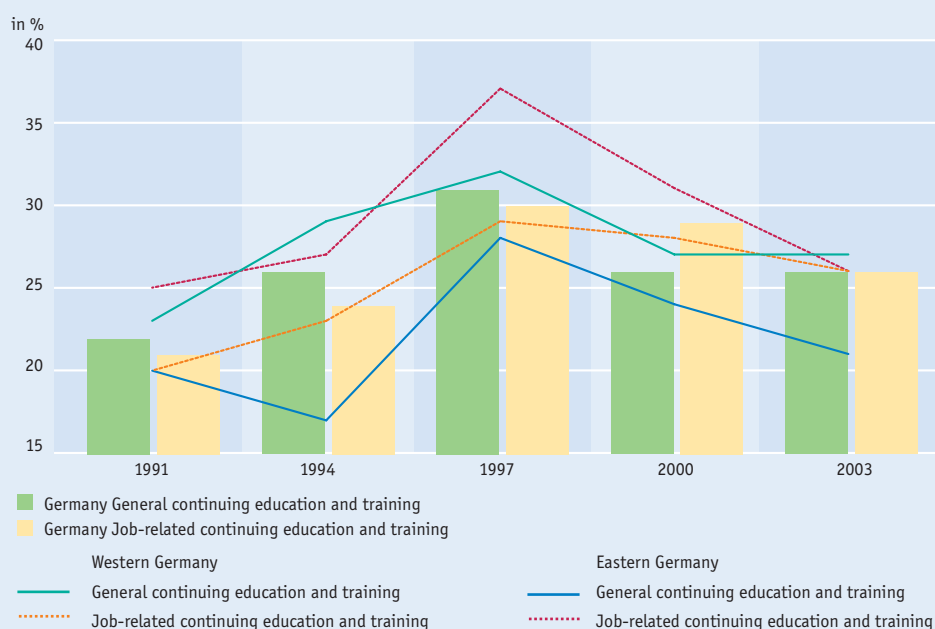
Decreasing number of participants – participation structure largely unchanged

In contrast to public rhetoric on the importance of lifelong learning, participation in general and vocational continuing education has been decreasing since 1997 in all qualification groups. The clear divide between groups with low and those with high levels of educational attainment has remained largely unchanged since. In 2003 for example, 39 % of university graduates participated in job-related continuing education, which was five times the number of participants without vocational qualifications (7 %) and still twice the number of training graduates from the dual system or full-time vocational schools (18 %).

Reduction of the funding volume for adult education

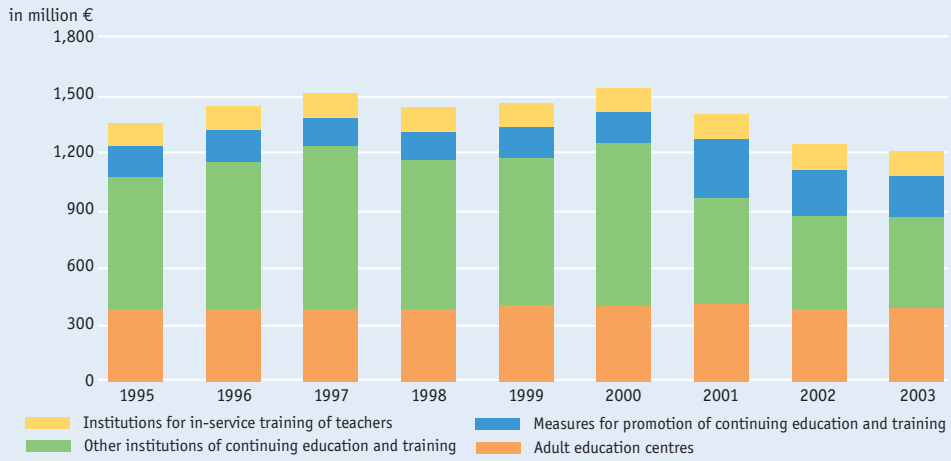
The expenditure by major public fund providers on general and vocational education and training has markedly decreased in recent years. The Federal Employment Agency reduced its funding for adult education by half from approx. Euro 7 billion to euro 3.6 billion between 2001 and 2004. The Federal Government, the *Länder* and the local authorities have been reducing their expenditure on continuing education and training by 21.5 % (euro 332 million) since 2000 so that it is now below the level of funding in 1995.

Figure G1-1: Participation in general and job-related continuing education and training 1991 to 2003 (in %)



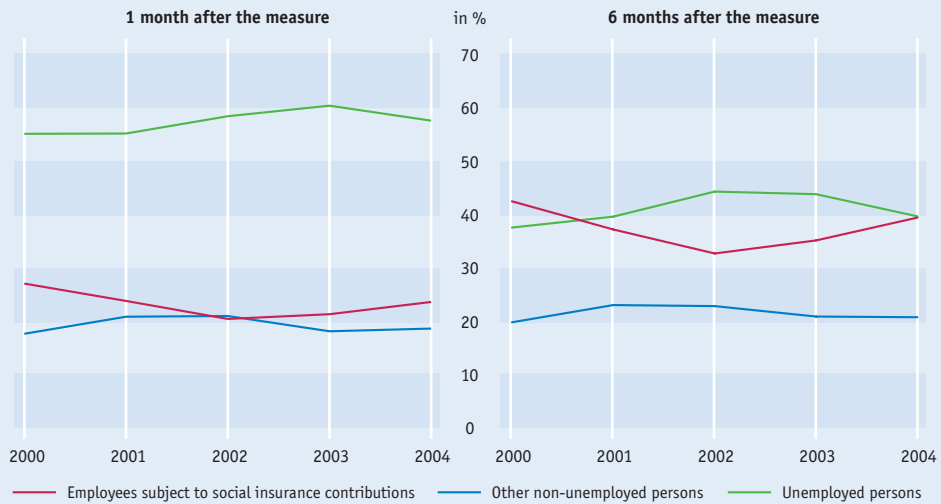
Source: Reporting system on continuing education and training IX, 2004, p. 16 and p. 22

Figure G2-2: Public expenditure on continuing education and training 1995 to 2003 (in million euros)



Source: Federal Statistical Office Germany, Yearly public finance statistics

Figure G4-2: Work status of persons having participated in measures for the promotion of continuing vocational education and training 2000 to 2004 (in %)



Source: Federal Employment Agency, own calculations

Limited positive labour market effects of the Federal Employment Agency's activities to promote continuing vocational education and training

Despite the concentration of funds and the reform of the steering tools for the promotion of continuing vocational education and despite the decline in the number of new entrants in these programmes by 65 % since 2000, adult education funded by the Federal Employment Agency has only a limited impact on the labour market. A higher level of employment could not be achieved six months after the measure ended and the unemployment rate could not be reduced between 2000 and 2004. Both rates were 40 % in 2004 and had thus not improved over 2000. A particular problem seems to be that not only the great regional disparities but also the disadvantages of older workers (over 45 years of age) compared to the younger labour force (under 30) have prevailed.

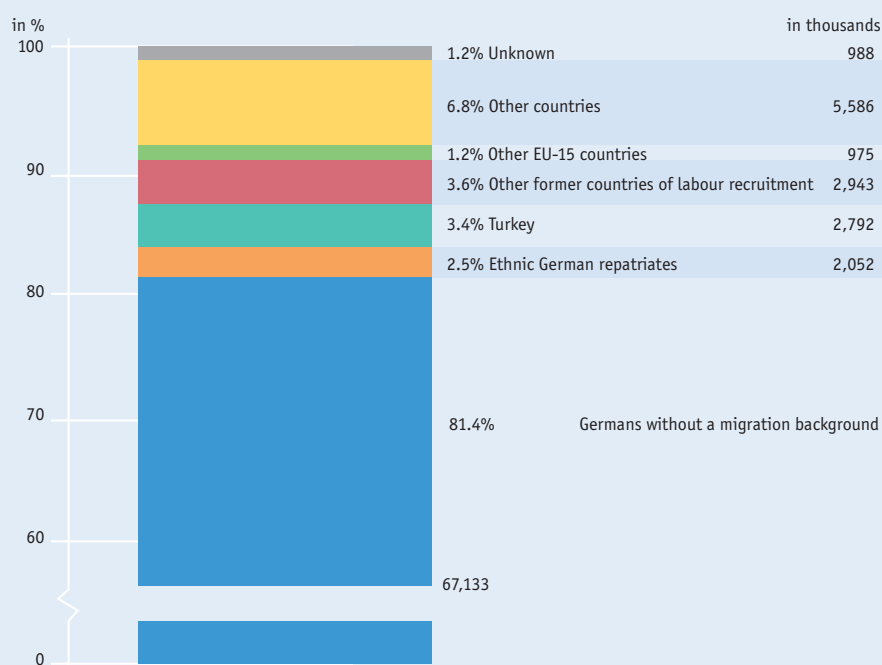
Chapter H: Migration

First differentiated picture and actual number of people with a migration background

Owing to the new survey method of the 2005 Microcensus, which included not only data on nationality but also other features of the migration status, it was for the first time possible to identify the actual number of people with a migration background and to provide a differentiated picture. People with a migration background account for almost one fifth (18.6 %) of the entire population, which is double the figure previously given for foreigners in official statistics. The percentages for the different age groups vary considerably; the figure is highest (32.5 %) for the youngest (under 6). There are 15.3 million people with a migration background, of whom 7.3 million are foreigners and 8 million Germans with a migration background.

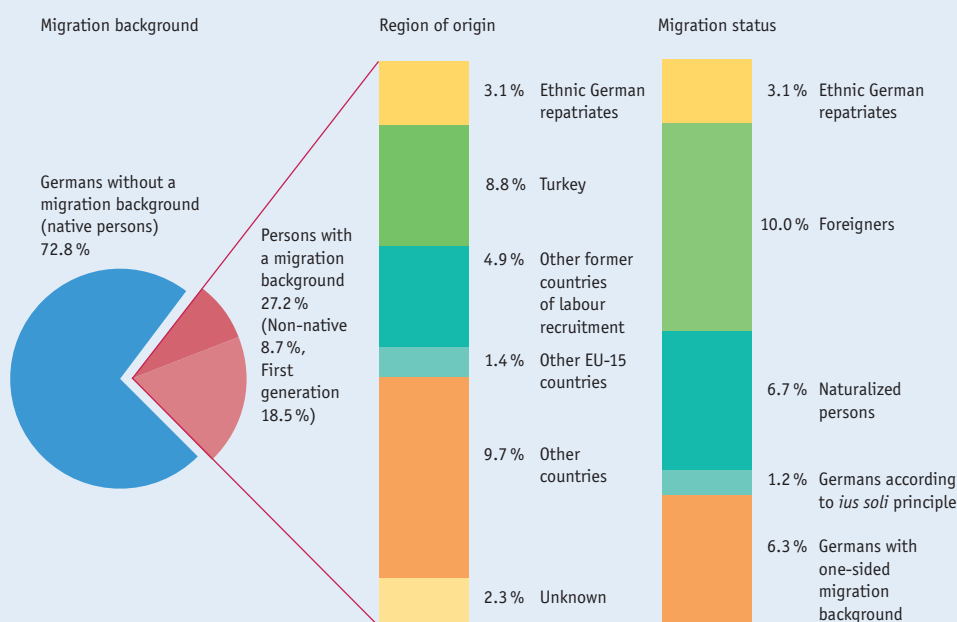
The group of migrants under 25 is of particular interest from the education policy perspective. They account for approx. six million or 27.2 % of the population of the same age. Integrating this group into the education system is a great challenge because of its heterogeneous character regarding the status and time of migration and the ethnic origin of its members.

Figure H2-1: Population 2005 by migration background and region of origin



Source: Federal Statistical Office Germany, Microcensus 2005 (provisional results)

Figure H2-2 (extended): Population under 25 years of age by migration background, migration status and region of origin 2005



Concerning foreigners and ethnic German repatriates, the nationality refers to the current nationality; for naturalized persons and German first-generation migrants, to their former nationality or the nationality of their parents. Excluding Tunisia and Macedonia. Source: Federal Statistical Office Germany, Microcensus 2005 (provisional results)

Features of educational participation and careers

With a few minor differences, the rates of attendance at day care centres for pre-school children (four and older) are almost equally high for Germans (89 %) and foreigners (84 %).

Differences are growing in the transition to primary school

Early school entries of foreign children were half the rate indicated for the total of school students and late school entries were double that rate in 2004.

Children with and without a migration background are distributed quite unevenly among the different types of school. Furthermore it is more difficult for children with a migration background to enter advanced types of school and complete education there.

Children with a migration background are given somewhat less high marks in primary school even if they perform just as well as non-migrants, and this has an unfavourable impact on their transfer to secondary school. No discrimination can be found in performance assessment in secondary education.

The transition to vocational training and working life is particularly critical.

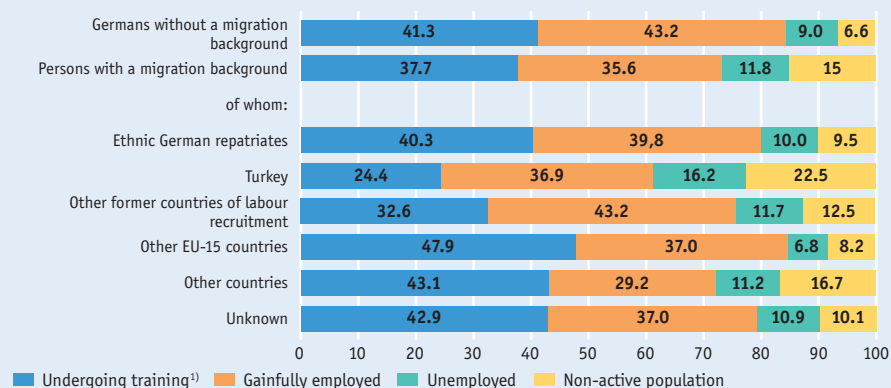
- The share of foreigners in the total number of trainees in West Germany decreased from 9.8 % in 1994 to 5.6 % in 2004.
- Representative surveys have revealed that young Germans without a migration background are twice as likely to complete vocational training as young foreigners – even if their subject performance is the same. (Without assessment of achievement, they are even five times more likely to obtain vocational qualifications.)

Table H3-1: Migrants in grade 9 of different school types by region of origin in 2000 (in %)

| Migration background/ Group of origin | 15-year-olds by educational pathway | | | |
|---|-------------------------------------|---------------------|---------------------------------|----------------|
| | Secondary general school | Intermediate school | Integrated comprehensive school | Grammar school |
| | in % | | | |
| Without a migration background | 16,6 | 38,6 | 11,6 | 33,2 |
| With a migration background – Total | 31,8 | 29,7 | 14,0 | 24,6 |
| of whom | | | | |
| Turkey | 48,3 | 22,1 | 17,0 | 12,5 |
| Other former countries of labour recruitment | 30,0 | 31,4 | 13,6 | 25,1 |
| Ethnic German repatriates (former Soviet Union) | 38,4 | 33,6 | 9,8 | 18,2 |
| Other countries | 20,5 | 29,3 | 15,5 | 34,6 |

Source: PISA E 2000, own calculations

Figure H3-9: Population aged 20 to under 26 by migration background, region of origin* and training/employment status 2005



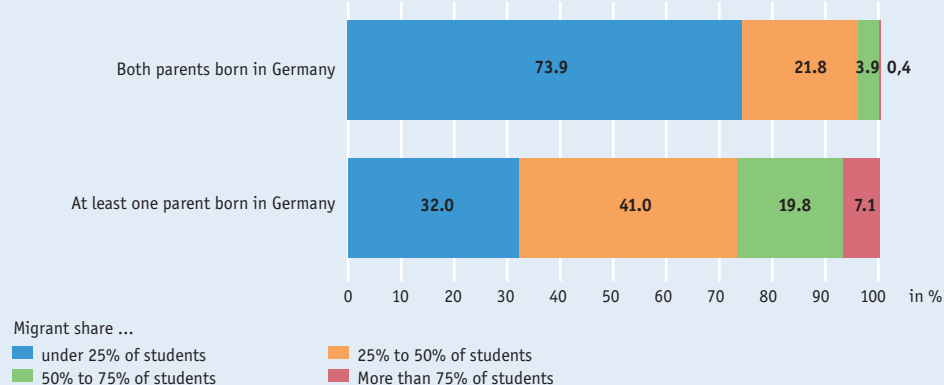
* Current or former first nationality of the persons interviewed or of their parents

1) Including persons who are gainfully employed at the same time

Source: Federal Statistical Office, Microcensus 2005 (provisional results)

- As a result of the selection mechanisms in the school sector, young people with a migration background are greatly underrepresented in the total of persons qualified to enter higher education.
- Training rates and employment rates are lower for young adults (aged 20 to under 26) with a migration background. However, the differences between migrant groups by country of origin are greater than the differences between the total number of people with and without a migration background. Beyond educational qualifications this is obviously due to the different cultural traditions of the countries of origin.

Figure H4-2: Migrants as a percentage of all school students with and without a migration background (grade 9)



Source: PISA E 2003, recalculations by the Institute for Science Education (IPN)

School segregation at lower secondary level

The socio-structural composition of learning groups has an impact on learning behaviour and achievement where it is of a permanent nature (segregation). PISA 2000 revealed that a considerable number of secondary general schools in Germany – approximately one in five at national level – are working in very problematical learning environments which are characterized by an extremely high percentage of migrants and low social status of school students as well as frequent learning difficulties and behavioural problems. These schools show a lower level of reading skills than would be expected merely on account of the students' individual situation. A high percentage of migrants also means increasing social isolation. Considerable segregation can be found in lower secondary education: One in four young people with a migration background attends a school where migrants account for the majority of students.

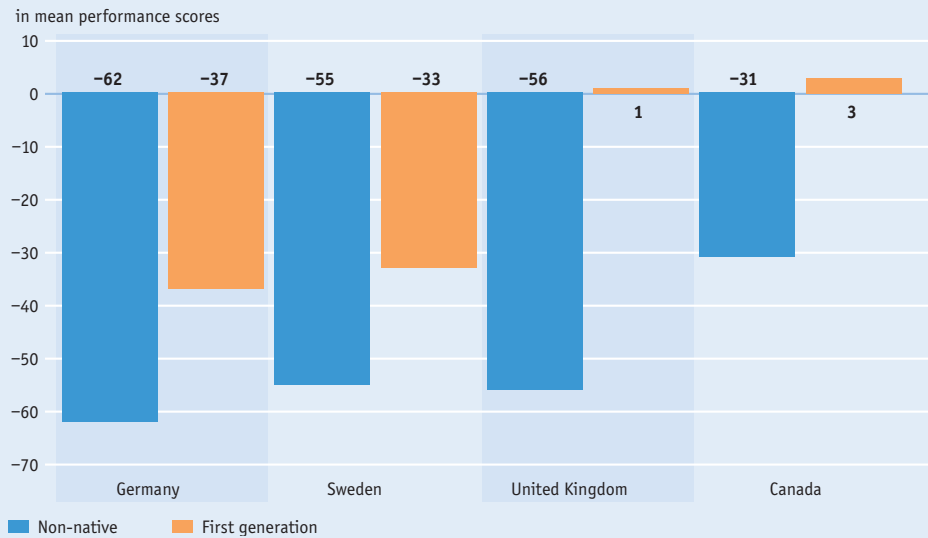
Marked increase in support measures

The Federal Government and the *Länder* have made diverse efforts to promote integration: from early promotion of language skills in day care centres and improved methods for language skill diagnosis to remedial classes for Germans and out-of-class integration programmes offered particularly at schools with a high percentage of migrants. Children and young people with a migration background participate in remedial programmes at all-day schools to a disproportionate extent.

Particularly schools with a high percentage of migrant students generally offer a broad range of support programmes: from teaching German as a foreign language to native language classes, from out-of-class programmes to improved guidance and counselling for parents.

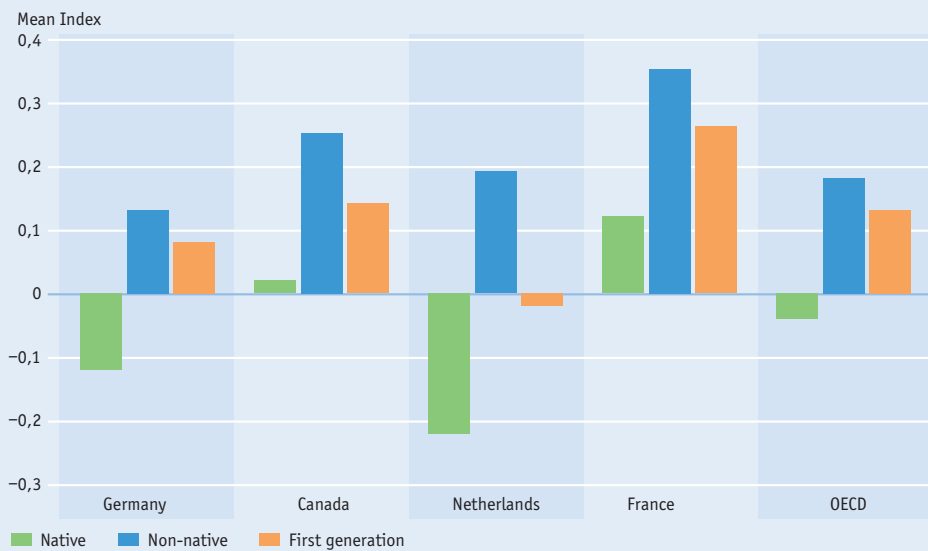
One problem is that too little is known about the impact and mechanisms of support measures. The systematic promotion of German language skills in terms of oral expression and vocabulary – up to secondary level – seems to pay off; however, hardly any findings are currently available in Germany regarding the impact of specific intervention.

Figure H5-1: Differences in mean performance scores on the reading scale (PIRLS 2001) of non-native and first-generation migrants compared to non-migrants in selected countries (in mean performance scores)



Source: Schnepf, S. V. (2004), *How different are immigrants?* Bonn, p. 14

Figure H5-3: Index of student attitudes towards school (PISA 2003)* in selected countries by migration background



* Results based on students' self-reports.

Source: Stanat, P. & Christensen, G. (2006): *Where immigrant students succeed.* Paris

An international comparison shows greater differences between migrants and non-migrants in Germany in terms of educational background and social status than in the other European countries with labour migration. At the same time it shows that non-native children score very low on the reading scale at primary level and that the difference between them and non-migrants of the same age is greater than in other countries.

As was shown by PISA 2003 for the secondary level, other countries seem to be more successful in ensuring integration at school level. In countries like Australia, Canada and New Zealand, non-native and first-generation migrants have attained about the same level of performance as non-migrants. Migrants in Germany score very low on the reading scale by international standards: 42 % of non-native and 44 % of first-generation migrants in Germany belong to the at-risk group on the lowest skills level while this share is about 25 % in other countries; 14 % of German school students without a migration background belong to this at-risk group.

But the report also points out that these problems cannot be blamed on the education institutions alone. Especially the Anglo-Saxon immigration countries are systematically pursuing specific immigration and integration policies. On the part of the migrants themselves, important factors promoting their German language proficiency and thus social integration include arrival in Germany at an early age, parents' level of education, communication in the family (speaking German) and educational motivation.

A major asset in this connection is that migrants and their children are highly motivated and have quite a positive attitude towards school.

Chapter I: Impact and Output of Education

Individual and social output of education

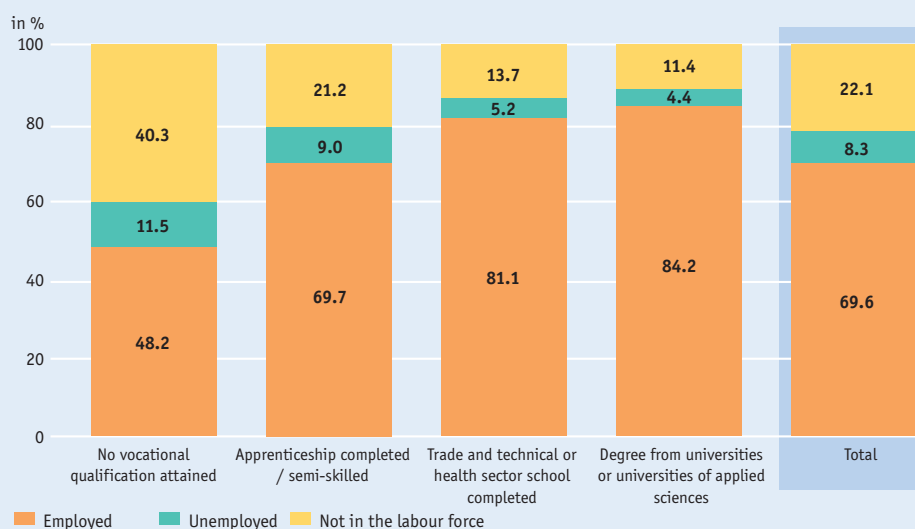
In many spheres of life, school education and vocational training have a positive impact on individuals and society at large. Individuals with higher educational qualifications have a better chance of finding permanent and adequate employment (cf. Figure I1-1).

A positive impact can also be noted outside the world of work, for example with regard to health and the possibilities of participation in political life (cf. Figure I2-2). These individual chances are matched by external benefits for companies, institutions and society. The findings of recent economic research have revealed that investments in education have a positive impact not only on growth and innovation but also in social policy terms.

Long-term benefits of education

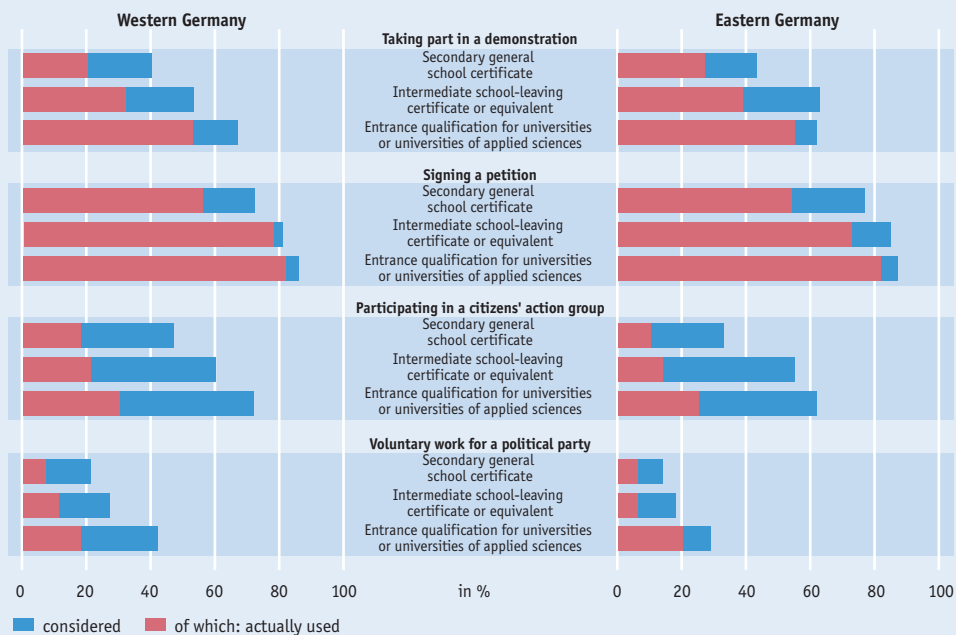
However, the positive impact of education can only materialize if there are opportunities for people to apply the knowledge and skills they have acquired during their educational careers. The education process does not automatically produce a positive output. A major feature of education is its long-term impact. Society at large will benefit from education efforts made in the past.

Figure I1-1: Employed, unemployed and non-active population as a percentage of the age group 25 to under 65 years 2004 by level of vocational qualification attained (in %)



Source: Federal Statistical Office Germany, Microcensus

Figure I2-2: Considered and actually used forms of political participation in western and eastern Germany 2002 by level of general school education attained (in %)



Source: German General Social Survey (ALLBUS) 2002 (Western Germany, n = 1.787; Eastern Germany, n = 750), own calculations

The cumulative nature of education is an asset

The long-term benefit and impact of education during an individual's life depends to an increasing extent on participation in lifelong learning rather than on the school education or vocational training completed early in life. But not everybody benefits to the same extent from this increasingly open structure of the education system. Our highly differentiated education system divides society into those who are successful in skills accumulation and those who are not and who sometimes fail because they have not completed training. Individuals can build their lives on a sound basic education and benefit from the great variety of opportunities for skills accumulation. But on the other hand, they also suffer from the negative consequences of a deficient and poor education during their entire lives.

