

Education in Germany 2016

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



Summary of important results

Commissioned by 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

Edited by
Autorengruppe Bildungsberichterstattung
(Authoring Group Educational Reporting)

Production
W. Bertelsmann Verlag GmbH & Co. KG
P.O. Box 10 06 33, 33506 Bielefeld
Phone: +49(0)521 / 9 11 01-11
Fax: +49(0)521 / 9 11 01-19
E-mail: service@wbv.de
Internet: www.wbv.de

Design
M. Schnepf, www.lokbase.com

© W. Bertelsmann Verlag
GmbH & Co. KG, Bielefeld 2016
Printed in Germany

Bibliographical details:

This summary is based on the publication *Bildung in Deutschland 2016. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung und Migration* (Education in Germany 2016. An indicator-based report including an analysis of education and migration).

Edited by: Authoring Group Educational Reporting commissioned 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)

W. Bertelsmann Verlag, Bielefeld 2016,
ISBN 978-3-7639-5742-2
Ord. no. 6001820e
DOI: 10.3278/6001820ew

Available at
www.wbv.de,
service@wbv.de,
phone +49(0)521 / 9 11 01-11,
fax +49(0)521 / 9 11 01-19,
and from bookshops.

The authors and the publishing house have endeavoured to compile the information contained in this publication with the utmost care. However, they cannot rule out that some data may be based on erroneous information or that changes had already occurred by the time of printing. For this reason, no guarantee can be given or liability accepted for the accuracy and completeness of the information presented.

Authors:

Prof. Dr. Kai Maaz (*DIPF*),
Speaker of the Authoring Group
Prof. Dr. Martin Baethge (*SOFI*)
Pia Brugger (*Federal Statistical Office*)
Prof. Dr. Hans-Peter Füssel (*DIPF*)

Heinz-Werner Hetmeier (*Federal Statistical Office, until Sept. 30, 2015*)
Prof. Dr. Thomas Rauschenbach (*DJI*)
Prof. Dr. Ulrike Rockmann
(*Statistical Office Berlin-Brandenburg*)
Prof. Dr. Susan Seeber
(*DIPF/University of Göttingen*)
Prof. Dr. Andrä Wolter
(*Humboldt University Berlin/DZHW*)

Coordination:

Dr. Stefan Kühne (*DIPF*)

Assisted by:

Dr. Volker Baethge-Kinsky (*SOFI*)
Dr. Iris Gönsch (*Federal Statistical Office*)
Mariana Grgic (*DJI*)
Rüdiger Hesse (*University of Göttingen*)
Katrin Isermann (*DIPF*)
Dr. Daniela Julia Jäger (*DIPF*)
Dr. Christian Kerst (*DZHW*)
Dr. Holger Leerhoff
(*Statistical Office Berlin-Brandenburg*)
Thomas Lehmann
(*Statistical Office Berlin-Brandenburg*)
Christiane Meiner-Teubner
(*DJI/TU Dortmund University*)
Dr. Christiane Penk (*DIPF*)
Markus Wieck (*SOFI*)
Dr. Sebastian Wurster (*DIPF*)

The national education report is based on a project which was funded 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). This brochure has been funded by the BMBF.

Commissioned 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)



**KULTUSMINISTER
KONFERENZ**



Federal Ministry
of Education
and Research

The Authoring Group Educational Reporting is responsible for the content of the German national education report 2016, upon which this summary is based.

Preface

“Education in Germany” is an indicator-based report which has been published at two-year intervals since 2006. It covers all levels of education and combines a comprehensive review with a specific thematic focus. The current volume for 2016 focuses on analysing the situation of people with a migration background within the German education system. It was jointly commissioned by the Standing Conference of Länder Ministers of Education (KMK) and the Federal Ministry of Education and Research and was drawn up by a group of authors who bear joint responsibility for it. The members of the Authoring Group are leading representatives of the following scientific and statistical organizations: the German Institute for International Educational Research (DIPF), the German Youth Institute (DJI), the German Centre for Research on Higher Education and Science Studies (DZHW), the Sociological Research Institute at Göttingen University (SOFI), the Federal Statistical Office and the statistical offices of the Länder.

The national education report is a major instrument of education monitoring in Germany alongside the international student performance surveys PISA, TIMSS and PIRLS, the national review on the achievement of the education standards of the Länder in school years four, nine and ten, and Länder-specific assessments of student performance. It provides concise information about the current situation in the German education system, performance and major problems, about lifelong learning processes, and about the development of education in Germany from an international perspective. The reports are addressed to different target groups in educational policy, administration and practice, in science and training, and in the general public.

The national education reports are characterized by three basic features:

- They are designed on the basis of an educational concept whose goals are reflected in three dimensions: individual self-direction, social participation and equal opportunities, and human resources.
- Following the lead concept of lifelong learning, they consider all sectors and levels of education and provide information about the scope and quality of the programmes offered by various institutions and about participation in such programmes.
- They are based on indicators from official statistics and representative social science surveys which, if possible, cover the developments in recent years and decades and involve comparisons at national and international level.

These quality and relevance standards, however, also reflect the limitations of the national education report. It covers the current problems of educational development only to the extent to which solid data are available. The national education report 2016 is based on the same set of core indicators as the preceding four volumes and in this way enables comparison over time with varying focuses. The specific informative value of educational reporting is derived from this updatability. In addition, the sixth volume includes further indicators relating to new topics, for example educational personnel in continuing education.

The reports as well as the indicator concept and the complete set of data tables on which they are based are available at www.bildungsbericht.de (in German, with these main findings in English).

Content

Introduction	5
Contexts of Education	6
Education Institutions and Participation	8
Procedural Aspects	11
Results and Outcomes	14
In Focus: Education and Migration	17
Central Challenges	21

Abbreviations of the Federal states

BW	Baden-Wuerttemberg
BY	Bavaria
BE	Berlin
BB	Brandenburg
HB	Bremen
HH	Hamburg
HE	Hessen
MV	Mecklenburg-West Pomerania
NI	Lower Saxony
NW	North Rhine Westphalia
RP	Rhineland Palatinate
SL	Saarland
SN	Saxony
ST	Saxony Anhalt
SH	Schleswig-Holstein
TH	Thuringia
O	Eastern Germany
W	Western Germany
D	Germany

Introduction

In common with its predecessors, the German National Education Report 2016 documents the state of development and progress of the education system across all its areas and sets out current challenges. The feature chapter on “Education and Migration” of this year’s report returns to the special topic of the first national education report of 2006, and analyses the situation of people with and without a migration background in the education system from today’s viewpoint. Before examining the findings produced under this in-depth analysis, the report summarizes the key findings concerning the overarching developments and perspectives of the education system in terms of the following questions:

- What changes have taken place in the fundamental societal conditions for education in Germany?
- What developments can be observed regarding the resources provided for education (staff, materials, equipment, financial)?
- What trends are discernible in education programmes and education participation and in the area of education processes?
- What statements can be made with regard to education results and outcomes?

The data-based format of the national education report does not lend itself to directly deriving recommendations for action for political or educational measures, nor is it intended to do so. However, the findings can help to recognize where action is needed for certain groups and for certain areas of the education system. In the light of this, the key challenges identified by the authors are described at the end of this section.

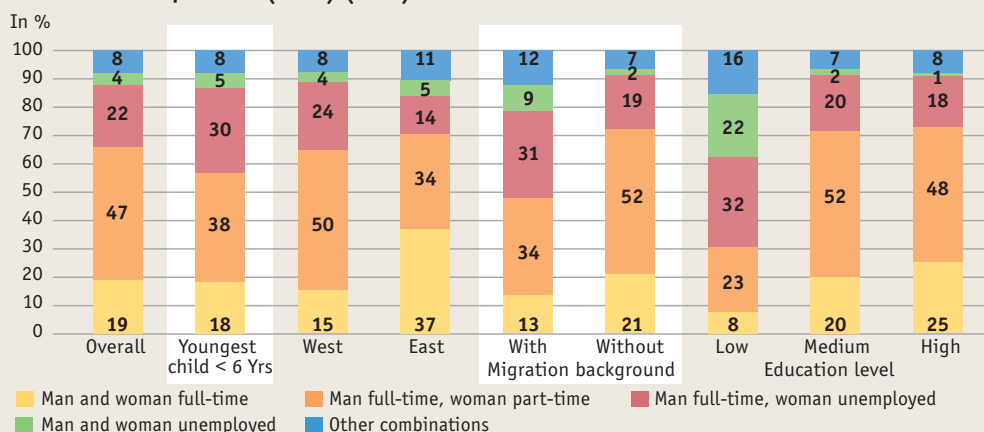
Contexts of Education

In spite of a long-term downward trend, a slight increase in the numbers of births in the last few years: 715,000 births were registered in Germany in 2014, the first time more than 700,000 babies were born since 2004. This number will remain relatively stable for the next 5 years. This is causing a higher demand for early childhood education provision in the short term and for school education provision in the medium term, a trend that is reinforced by the current migration of families with children which are seeking asylum or recognition as refugees.

Continued reduction in the proportion of families with children in the total population and change in parental employment rates: Not quite half (48%) of Germany's population now live in families, i.e. households with adults and their minor children. This contrasts with 12 years ago, when the figure was 54%. More people live in families in the west of Germany than in the east where the proportion has continued to fall to 42% in the last 5 years. As a result of increased female employment, the formerly widespread model of the husband and father as the single earner is now only reflected in one in five families and is only slightly more common than families where both partners work full-time. In approximately half of families with two adult partners, the man works full-time while the woman is part-time. There is a discernible positive correlation between employment status, including hours worked, and education levels of the parents.

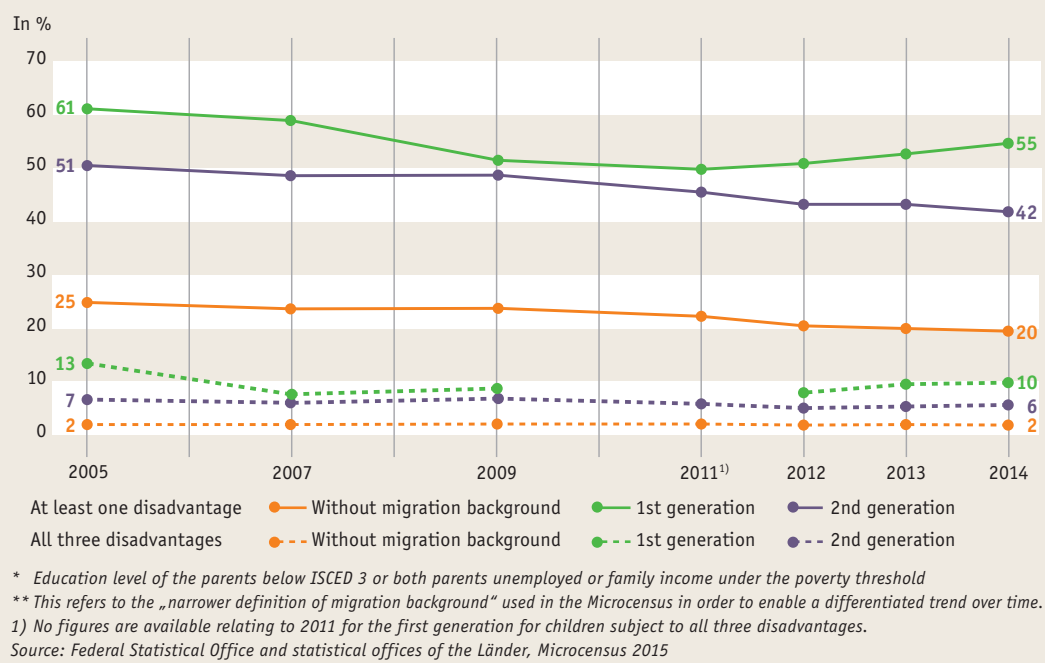
Despite reduction, over one in four minors still growing up disadvantaged: In 2014, fewer children were growing up in households with unemployed parents and parents with low formal qualifications than in 2006. However, there was a slight increase in financial disadvantage, i.e. living below the at-risk-of-poverty threshold. Although the proportion of children living with at least one of these disadvantages has fallen by 4 percentage points, that share is still 27.5%. The proportion living with all three disadvantages remains roughly stable at just under 4%. And despite positive trends, the number of children with a migration background growing up with these types of disadvantage is disproportionately high.

Figure 1: Employment status in families with two partners and children under 18 by age of the youngest child, region, migration background of the male partner, education levels of both partners (2014) (in %)



Source: Federal Statistical Office and statistical offices of the Länder, Microcensus 2014

Figure 2: Proportion of children with disadvantages* aged 6 to 9 from 2005 to 2014 by migrant generation (in %)**



Further efforts needed to reach the objective of increasing overall expenditure on education, research and science to 10% by 2015: Overall expenditure from all sources on education, research and science amounted to 257.4 billion euros or 9.1% of GDP in 2013 (and also 9.1% in 2014 according to provisional calculations). In 2014, 120.4 billion euros were invested in education as overall net public expenditure (not including social insurance) representing a 20.3% share, which was slightly higher than the previous year.

Continued staff growth in child-care facilities and need for replacement of older teaching staff in schools: A new record was set with 515,000 teaching staff in child-care facilities. This has been achieved both through the expansion of capacities for training early childhood teachers and the fact that staff in middle and older age groups have returned to their occupations in child-care facilities after raising families. However, a high proportion (43%) of younger qualified staff in particular are only employed on temporary fixed-term contracts in child-care facilities. In schools, there continues to be a high percentage of teachers who are aged over 50. There will be a high recruitment need for new school teachers particularly in the east German Länder up to 2025.

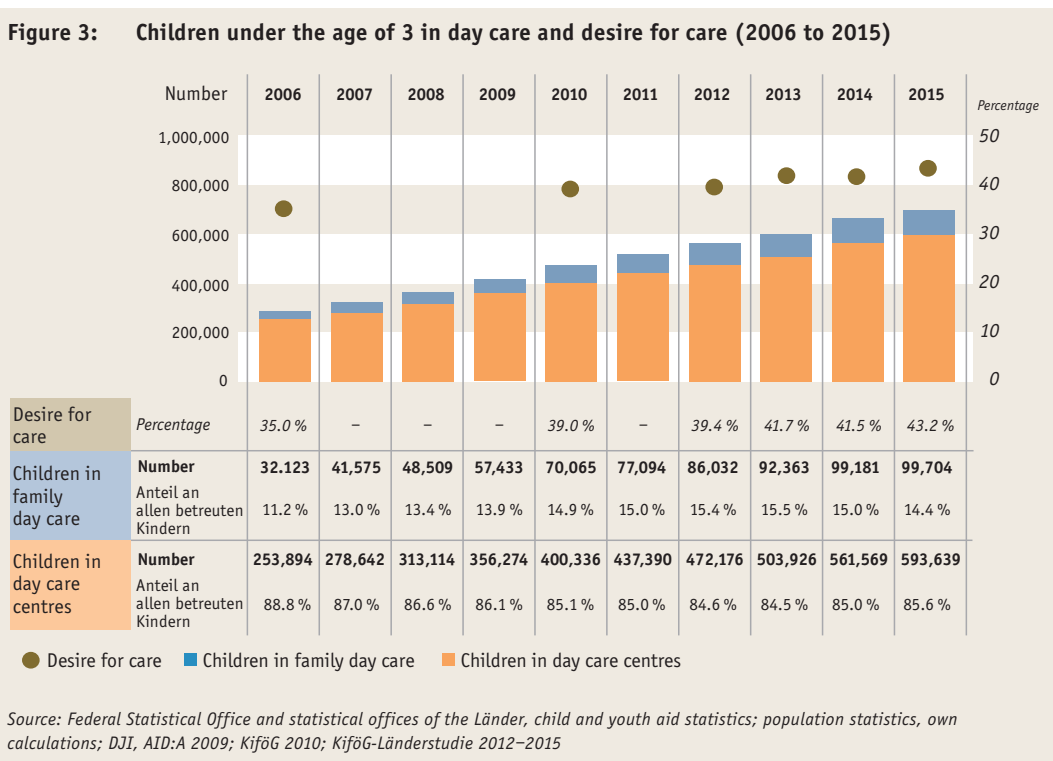
Continuing education not a highly professionalized teaching field: The indicator for staff in continuing education is included for the first time. It shows that continuing education is a field of teaching involving very diverse institutions with high rates of ancillary employment and a comparatively low average income including for those for whom it is the main source of employment, and this in spite of relatively high qualification levels (two thirds of all such teachers hold a higher education degree). Overall, the findings confirm the picture which has long been discussed in the academic arena of a semi-professional area of work (as demonstrated by limited exclusive academic training, a relative lack of career structures as well as of a common professional ethos etc.).

Education Institutions and Participation

Rates of participation in education by people with and people without migration backgrounds have moved closer together: Participation rates have risen further overall, and there has been a closing of the gap between people with and without migration backgrounds particularly among pre-school children and 16 to 29-year-olds. Whereas the participation rate for 16 to 29-year-olds with a migration background was considerably lower in 2005 than among their peers without a migration background, people with a migration background in 2014 participate at about the same rate as their peers without a migration background, although more frequently in lower-level schools or courses.

Continued increase in demand for day care for under-3-year-olds: Between 2013 and 2015, almost 90,000 additional places were created in child care facilities, increasing the proportion of children under the age of 3 in such facilities to 51.9% in eastern Germany and to 28.2% in western Germany. The increase in the number of children aged 3 to 5 over the same period, the continuing gaps in the provision of places for under-3-year-olds and the arrival of children from families seeking asylum or refugee status mean that a further need for expansion of child-care provision will have to be met in addition to qualitative challenges.

Longer joint learning gaining ground at school level: The number of pupils who attend schools which combine more than one type of programme has increased from 700,000 to 1.1 million since 2006. The majority are not taught in separate lower secondary (Hauptschule), intermediate (Realschule) or grammar school (Gymnasium) classes but in integrated programmes. In particular, young people with a low social status thus have more options

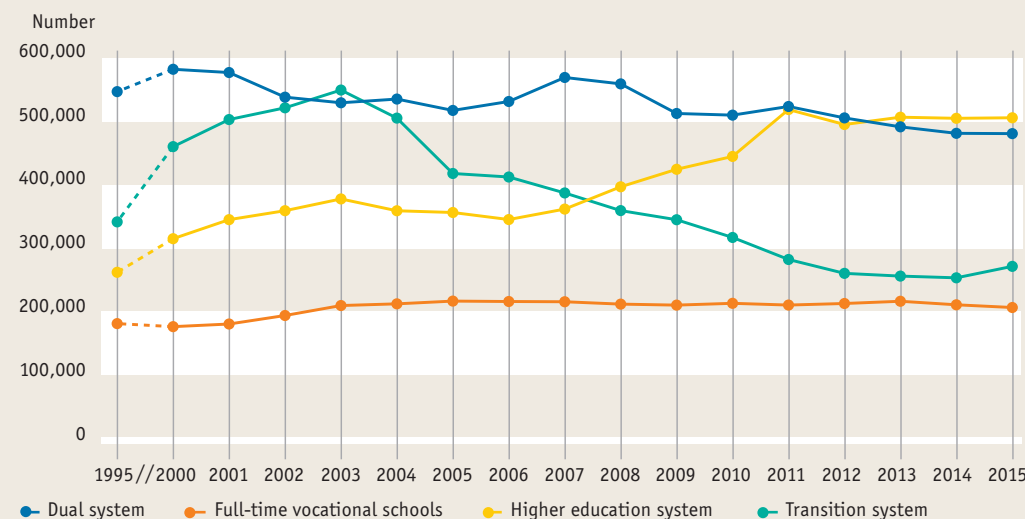


for attaining different school qualifications directly at one type of school. Schools which provide a number of educational pathways or comprehensive schools (Gesamtschulen) are also more likely to offer all-day schooling and have a higher proportion of children with special educational needs than other types of school.

Regional variations in the development of the private school sector: 11% of schooling is now provided by non-state providers. While these complement public schools in urban areas they are replacing shrinking public school provision in some rural areas. However, non-state schools are often smaller than state schools, and pupils at private schools, especially in cities, tend to have more favourable socio-economic backgrounds than those at state schools. Nevertheless, there is no systematic difference in the educational achievement of pupils at private and state schools as measured in terms of school qualifications attained.

Reduction in the number of new recruits to vocational training leading to full qualifications but continued high number of new higher education students: The number of young people entering training leading to full vocational qualifications continues to fall, while in 2015 the number of people entering the ‘transition system’ (of programmes providing basic vocational pre-training) rose (by 7.5%) for the first time in 10 years. Once again, in 2014 the number of new students in higher education was greater than the number of young people entering the dual system of vocational education and training. There were again more than half a million new students. This was the result of the rising number of people qualified to enter higher education and the slight increase in the percentage of people transferring to higher education as well as the increase in the number of international students. The demographic decline of the eastern Länder is partly offset by the migration of students from western Länder which also relieves the pressure on universities in western Germany.

Figure 4: Numbers of new entrants to the different sectors of vocational education and training from 1995 to 2015*



* Figures for 1995 to 2000 have been interpolated; 2015: provisional figures
 Source: Federal Statistical Office and statistical offices of the Länder, Integrierte Ausbildungsberichterstattung (Schulstatistik, Hochschulstatistik, Personalstandstatistik – für Beamtenausbildung im mittleren Dienst) [Integrated reporting on training (school statistics, higher education statistics, staffing statistics – for middle grade civil servant training)], Federal Employment Agency, Bestand von Teilnehmerinnen und Teilnehmern in ausgewählten Maßnahmen der Arbeitsmarktpolitik mit SGB-Trägerschaft des Teilnehmenden

Clear regional and occupation-related differences in supply and demand for vocational training:

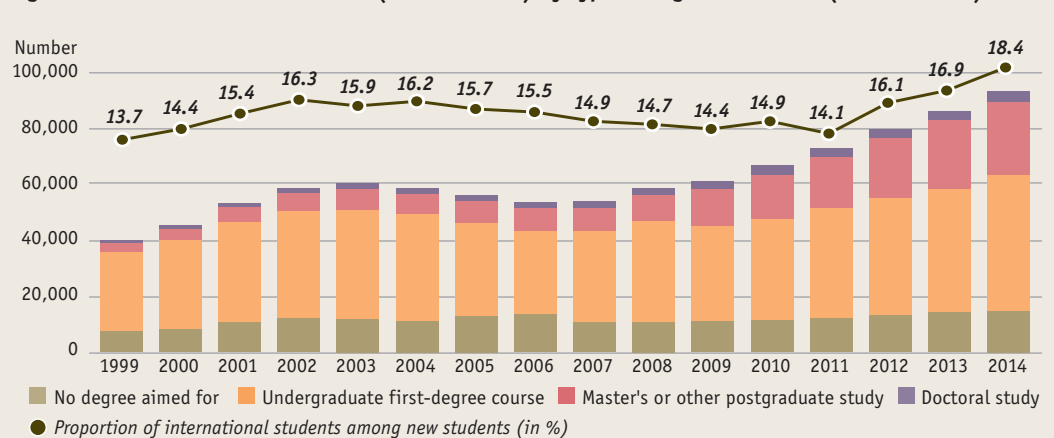
Marked regional disparities have arisen in supply and demand – these are strongest between west and east but also exist between north and south. There are stark differences within and between regions with regard to training opportunities for young people and recruitment prospects for companies. In particular, the training prospects for young people with at most a Hauptschulabschluss (lower secondary school certificate) in the eastern Länder have worsened due to the fact that there has been a sharp decline in the number of training programmes offered over the past decade, above all in the dual system. There are various ways in which different occupations and groups of occupations are affected by disparities in the supply-demand relationship. Supply outstrips demand especially in the skilled food trades and the restaurant and catering trades, while the opposite is the case in qualified technical, commercial and IT occupations.

More international students than ever: 18% of new students come from abroad. Many of them enrol in master's or doctoral programmes with most choosing MINT subjects (maths, informatics, natural sciences or technology). A growing proportion comes from Asia while the share of students from eastern Europe has fallen steeply. There are no exact numbers for how many international students remain in Germany after they complete their studies. However surveys show that up to half of them stay in Germany, at least initially, and that most of these are employed at a level that is commensurate with their study qualifications.

Despite continuing social disparities, a positive trend in participation in continuing education, above all in (prescribed) in-company further training:

In view of the overall uptake of continuing education, the positive trend reported in the national education report of 2014 continues with a 51% participation rate. The positive trend has reached the low-qualified for the first time. This is due to their participation in in-company further training. More than half of participants state that they took part only due to being required to do so by their employers, and this proportion rises to three quarters for the low-qualified. It is an open question as to how sustainable the benefit of such continuing education is, as there is little self-initiative involved, and it mostly takes the form of short-term activities. Overall, it does not overcome the social disparities linked to education and employment status or migration background. On the contrary, these remain stable.

Figure 5: International students (new students) by type of degree aimed for (1999 to 2014)



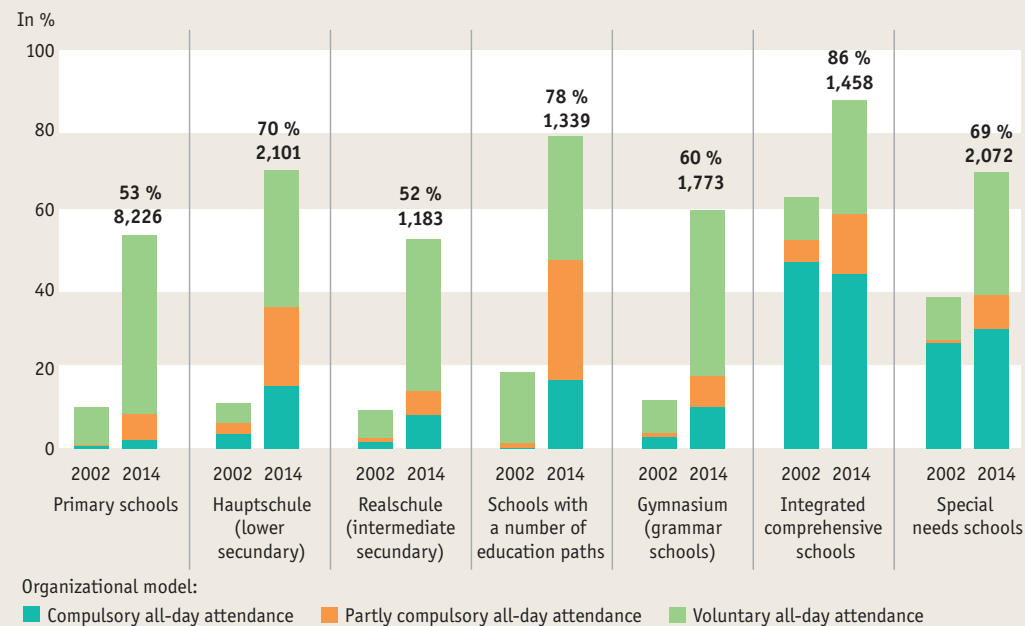
Source: Federal Statistical Office and statistical offices of the Länder, higher education statistics

Procedural Aspects

Increasing extent of child day care is not at the expense of time spent in the family: The contractually agreed hours of institutionalized day care have further increased for all age groups. 43% of under-3-year-olds in day care facilities in western Germany and 76% of under-3-year-olds in such facilities in eastern Germany are the subject of all-day care contracts. However, the hours agreed do not always coincide with the wishes of the parents and are frequently not used to their full extent. In spite of the increasing participation of under-3-year-olds in early-childhood education, children aged 1 and 2 years continue to spend most of the day with their families. Parents of under-6-year-olds devoted approximately 10% more time each day in 2012/13 looking after their children than in 2001/02.

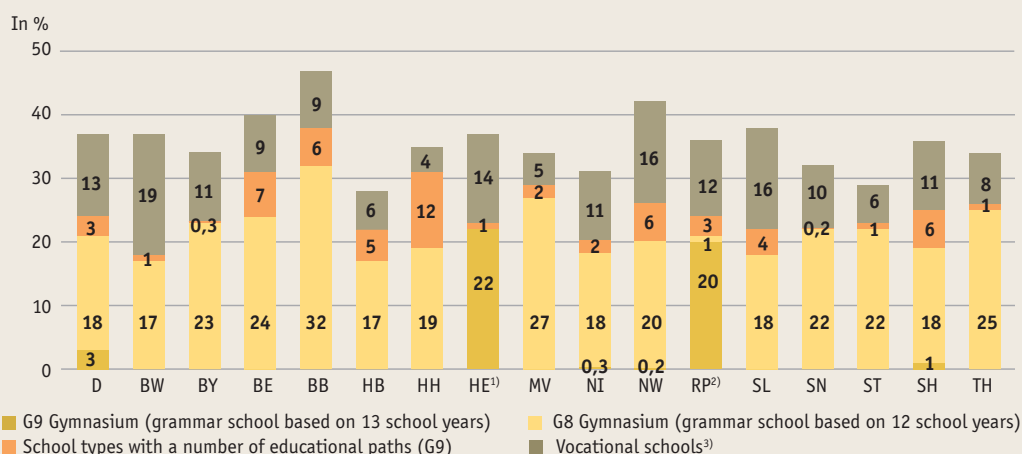
Continuing expansion of all-day schooling together with continued high take-up of out-of-school educational offerings and voluntary service: Overall, 60% of schools in Germany offer all-day programmes. Among these, the dominant model continues to be the “open” model of non-mandatory all-day attendance with the consequence that a balanced rhythm of teaching and extra-curricular activities across the whole school day is rarely possible. Overall, more than a third of all school pupils take advantage of all-day programmes to which they devote an average of almost 2.5 hours per week in addition to lesson times. However, the time devoted to educational activities outside of school remains twice as high at 5 hours per week. The great importance of activities in non-formal learning contexts is also demonstrated by the major increase in community involvement and in participation in voluntary services: In 2002, approximately 14,000 young people completed a year of voluntary social or environmental service. Now almost 90,000 are active in voluntary services.

Figure 6: All-day schools at primary and lower secondary level by type of school and organization model in 2002 and 2014 (in %)



Source: Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) (2016): *Allgemeinbildende Schulen in Ganztagsform in den Ländern der Bundesrepublik Deutschland*

Figure 7: Entry into upper secondary general education by type of school in 2014/15 (in % of beginners)*



* Not including special needs schools or new higher education students. Not including any new entrants to the transition system (of pre-vocational training measures) or to vocational training.

1) Upper secondary level of G9 Gymnasien including pupils of G8 Gymnasien

2) Reduction of school years to 12.5 to achieve Abitur (university entrance qualification) (G8.5)

3) Specialized or vocational Gymnasien, Fachoberschulen (specialized upper secondary schools) and Berufsoberschulen/technische Oberschulen (vocational/technical upper secondary schools), school-based vocational training (leading to dual qualifications).

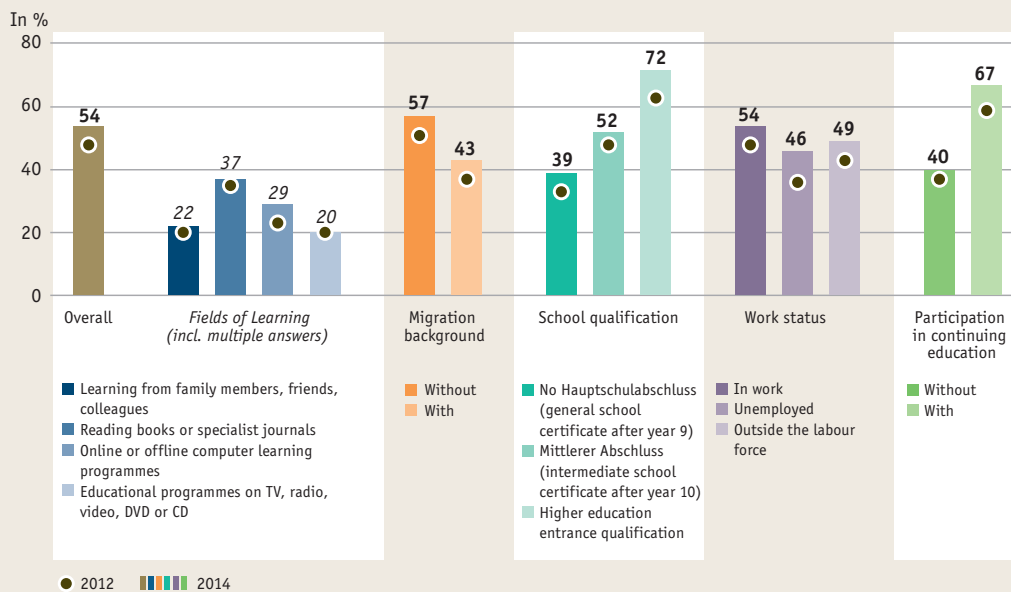
Source: Federal Statistical Office and statistical offices of the Länder, Integrierte Ausbildungsberichterstattung und Schulstatistik (Integrated reporting on training and school statistics) 2014/15, own calculations

Greater number of different pathways to higher education entrance qualifications: In addition to the classical route to the Abitur (university entrance qualification) at a Gymnasium (grammar school), a higher education entrance qualification can be gained in all the German Länder at (in some cases newly introduced) schools with several educational pathways or at vocational schools. Already about a third of young people gain higher education entrance qualifications at vocational schools; in some Länder it is more than a third. The variety of routes to the Abitur is also increasing within Gymnasien. Following the widespread reform which reduced the duration of Abitur programmes by one year, 6 Länder have re-instated the missing year.

Continued slight increase in the length of study at higher education institutions coupled with high satisfaction overall among students: Although there has been a sharp increase in student numbers, the average length of study for a bachelor's degree rose only slightly to 7.2 semesters. Students spent 11.3 semesters at universities to obtain a master's degree and thus approximately one semester fewer than for the degrees which it replaced (Diplom, Magister). The question of how far these numbers are still influenced by the introduction of bachelor's and master's degrees within a two-cycle system of study in Germany remains unclear. Student satisfaction remains high with the exception of criticism of the time restrictions on study courses.

Two thirds of bachelor degree holders proceed to a master's programme: Master's degrees appear to be becoming the new standard qualification at universities. The proportion of students proceeding to a master's programme at Universitäten is 80%. As with the decision of whether or not to study in general, enrolling in a master's programme is linked to social background.

Figure 8: Participation by adults (ages 18 to 64) in informal learning from 2012 to 2014 by field of learning and personal circumstances (in %)



Source: TNS Infratest Sozialforschung, AES (Adult Education Survey), own calculations

Complementarity of formal, non-formal and informal adult learning: Participation in informal learning varies strongly according to migrant background, educational attainment and employment status as well as participation in non-formal continuing education (continuing education not leading to formal qualifications). This shows how strong the correlation is between informal learning and experience in formalized learning environments. There are similar correlations between informal learning activities and levels of reading and numeracy skills.

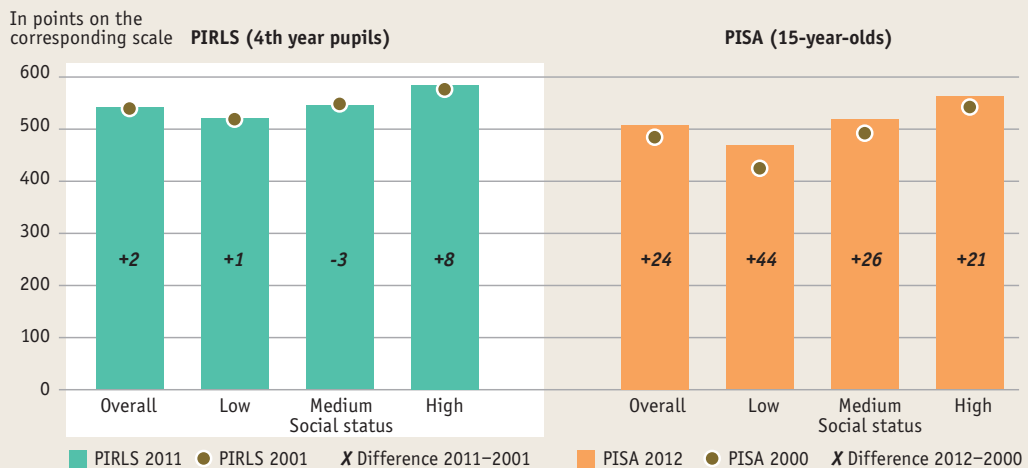
Results and Outcomes

Continuing need for remedial German tuition for about a quarter of 5-year-olds: Despite numerous initiatives in the field of language education, the share of children who need remedial German language tuition has remained constant for a number of years. In particular children from families with low educational attainment and families where German is not the everyday language are increasingly being diagnosed with linguistic deficits. In addition, such children more often start school at a later age than their contemporaries.

Decrease in young people with low literacy skills but these still clearly outnumber the proportion of young people without school-leaving qualifications: Improvements in performance since the first PISA survey are equivalent to more than a whole school year for literacy skills, particularly for young people from socio-economically disadvantaged families. The proportion of 15-year-olds with low literacy levels shrank by 8 percentage points to 15% from the year 2000 to 2012. However, only 6% of young people leave school without at least a Hauptschulabschluss (lower secondary school certificate). This indicates that there is a significant proportion of young people with a school qualification who have basic reading skills at best and are likely to have difficulties in the training market.

Stark variations between occupations in the proportion of prematurely terminated training contracts: There are strong variations between occupations as regards the number of cases where training contracts are terminated prematurely. The highest rates of over 40% are in the skilled crafts and trades. Up to 50% more training contracts involving foreign trainees are terminated early than those involving Germans. Trainees who have participated in transition measures preparing them for training are also affected by above-average termination rates for their training contracts.

Figure 9: Change in reading performance of 4th year pupils between 2001 and 2011 and of 15-year-olds between 2000 and 2012 by socio-economic status* (in score points)**



* The index of the highest parental occupation status (HISEI) was derived for all the pupils. The 25% of the pupils with the highest index values („high“) are compared with the 50% with medium index values („medium“) and the 25% with the lowest values („low“). Overall, the category does not add up to the sum of this distribution because pupils without valid HISEI data are also included.

** The competence levels of the international PISA and PIRLS studies cannot be compared directly.

Source: PIRLS 2001 and 2011; PISA 2000 and 2012, own calculations

Figure 10: Employment status of young adults (aged 30 to 34) by migration background in 2013 (in %)



* Current 28 EU member states

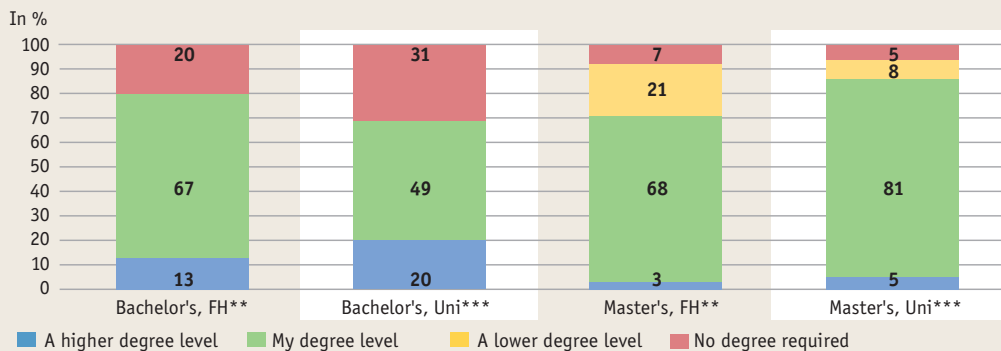
Source: Federal Statistical Office and statistical offices of the Länder, Microcensus 2013

Improved labour market prospects for training overall but continued disadvantages in eastern Germany and among foreigners: The percentage of trainees being retained as employees following completion of their training has risen in the eastern Länder and is getting ever closer to the rates in western Germany. People who have completed training in eastern Germany and foreigners, particularly those from countries outside the EU in Europe, Africa and Asia not only have disproportionately lower chances of obtaining employment, but also earn less on average after completing their training.

Influence of academic degrees on employment: A master’s degree more often leads to a commensurate level of employment than does a bachelor’s degree. Overall, the risk of unemployment remains low for those who complete higher education.

Less favourable results from measures supporting vocational further training in eastern Germany, for foreigners and for the low qualified: There is a strong regional variation between the eastern and western Länder in rates of (re-)integration into the labour market following the completion of measures for further training relevant to the job market – the only measures for which objective and robust data is available. Such measures have lower rates of success in terms of labour market integration for foreigners and the low-qualified.

Figure 11: Required higher education degree* for the work performed approximately 1 year after completion of studies (in %)



* In the case of bachelor’s degrees, the results for „lower degree level“ and „no degree required“ are combined.

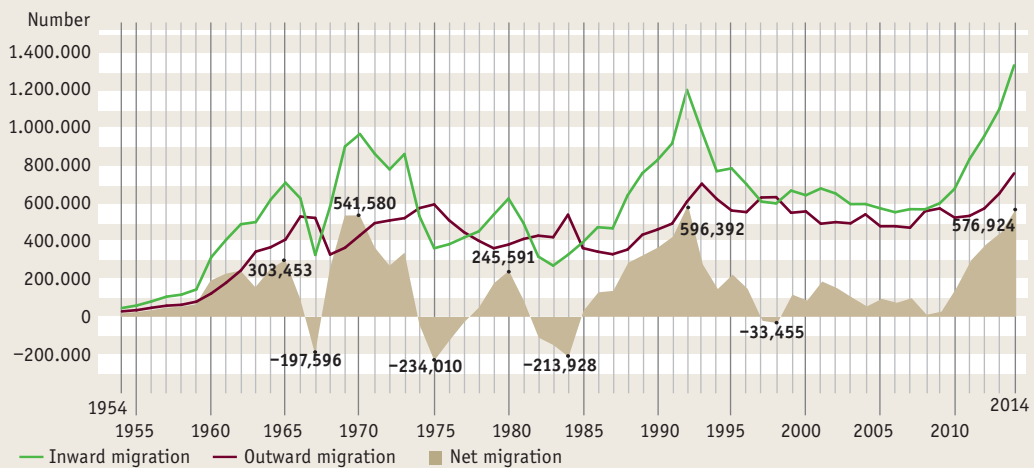
** Fachhochschule (university of applied sciences)

*** Universität

Source: DZHW (German Centre for Higher Education Research and Science Studies) survey of graduates who completed their degrees in 2013

In Focus: Education and Migration

Figure 12: Migration by foreigners to and from Germany, including net migration, from 1954 to 2014*

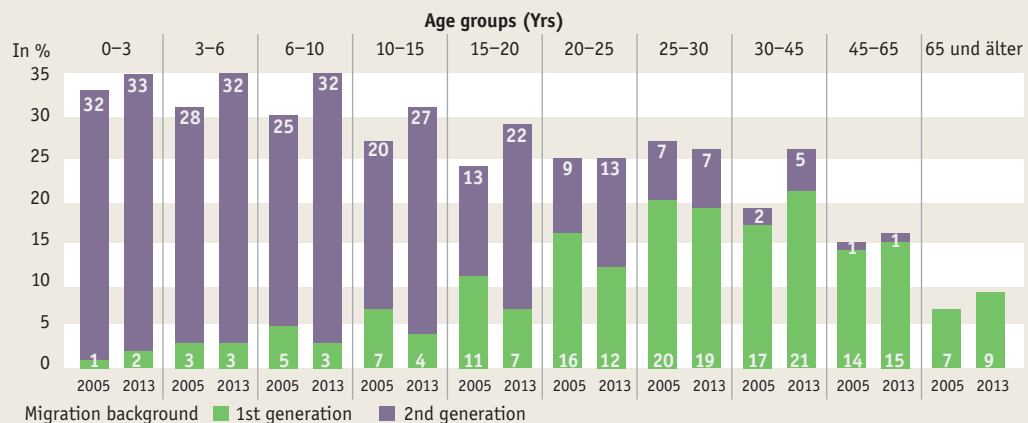


* Until 1990: West Germany only. Full comparisons cannot be drawn among and between the years 2008 to 2011 due to data adjustments in the population registers.

Source: Federal Statistical Office and statistical offices of the Länder, migration statistics 2014

Slight increase in the share of people with a migration background but with strong regional variations: Overall, 16.5 million people representing 21% of the population of Germany in 2013 had a migration background, and thus somewhat more than in 2005 (19%). Above all, the proportion of people from EU member states has increased. However, people with a migration background are not spread evenly across Germany's Länder. The majority (96%) live in the western Länder or in Berlin. In the past three years, the arrivals of people seeking asylum or recognition as refugees has gone back up to levels last seen in the 1990s.

Figure 13: Proportion of people in Germany with migration backgrounds by age group and migrant generation from 2005 to 2013* (in %)



* When comparing 2005 and 2013 it must be taken into account that the number of people with a migration background in 2005 was overestimated in the Microcensus and that the figures for 2013 have already been revised downwards (on account of the 2011 census adjustment). The „broader definition of migration background“ also used in the Microcensus is only surveyed every 4 years and the latest available figures are from 2013.

Source: Federal Statistical Office and statistical offices of the Länder, Microcensus

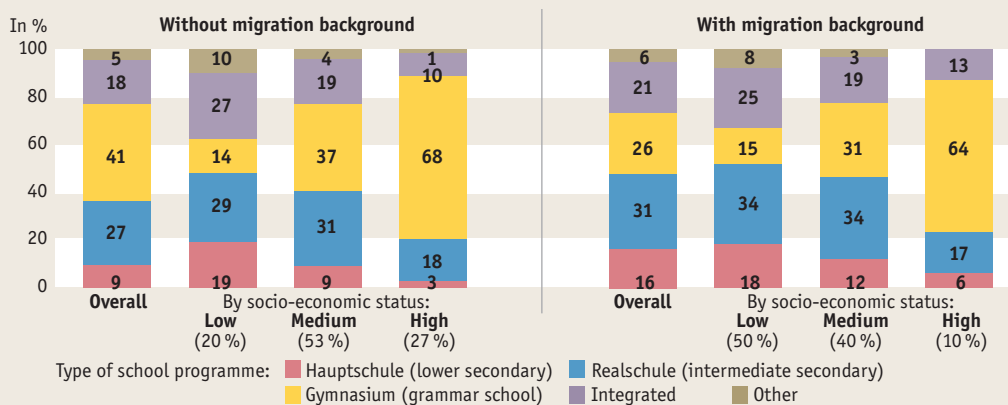
Heterogeneous composition of the population possessing a migration background: The composition of people with a migration background according to age, origin, migrant generation, and German language competence is constantly changing. Thus the proportion of children aged under 10 with a migration background has grown to more than a third of the overall population in that age-group. In some urban centres, the figure is more than 50%.

Young people with a migration background more likely to be disadvantaged: While one fifth of children and adolescents without a migration background are affected by at least one risk factor, the proportion of children and young people with a migration background who are exposed to a similar level of disadvantage is much higher. Among first-generation migrants, the share is 55% and among the second generation 42%.

Migration-specific tendency towards segregation in child day-care facilities and schools: Over a third of children for whom German is not their family’s language attend child-care facilities where the majority of the children also speak little or no German at home. This proportion rises to more than 50% in large urban centres like Berlin, Frankfurt or Munich. Similar tendencies can be observed in schools. There however, a close correlation is seen between low skills and classes or schools where there is a concentration of socio-economic disadvantages – regardless of the proportion of pupils with a migration background.

Increasing participation in education among young children and adults with migration backgrounds: The proportion of under-3-year-olds with a migration background who attend child-care facilities has doubled since 2009 to 22%. However, this is still well below the 38% of children without a migration background who attend such facilities. Children and adolescents from migrant backgrounds are significantly over-represented in types of schools offering lower qualifications. However, when socio-economic backgrounds are taken into account, similar proportions of 15-year-olds with and without migration backgrounds attended the different types of schools in 2012. This is an improvement on the situation in 2000. The proportions of holders of higher education entrance qualifications who enrol in higher education are also roughly the same for those with or without migration backgrounds.

Figure 14: Distribution of 15-year-old pupils across different types of school programmes by migration background* and socio-economic status (in %)**

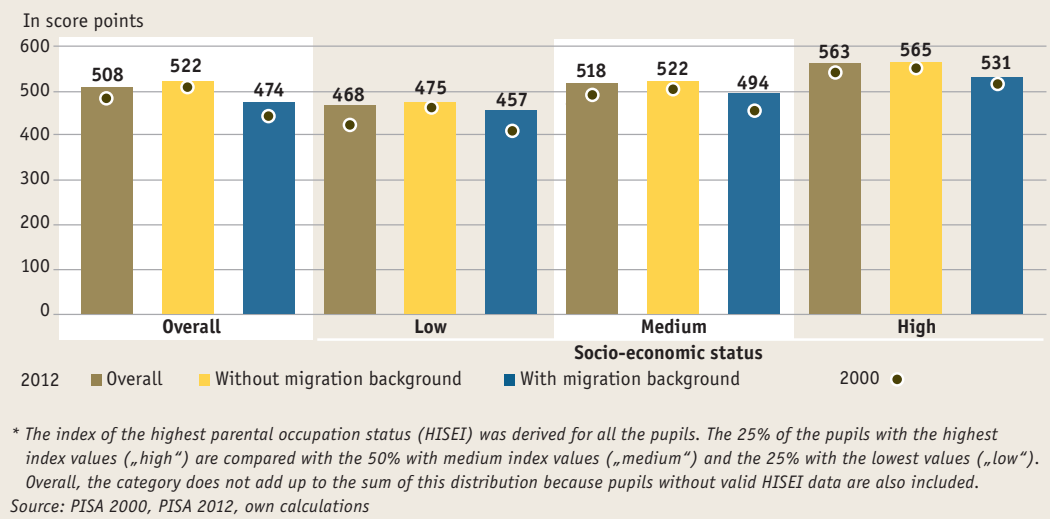


* At least one parent born abroad

** The index of the highest parental occupation status (HISEI) was derived for all the pupils. The 25% of the pupils with the highest index values („high“) are compared with the 50% with medium index values („medium“) and the 25% with the lowest values („low“). Overall, the category does not add up to the sum of this distribution because pupils without valid HISEI data are also included.

Source: PISA 2012, own calculations

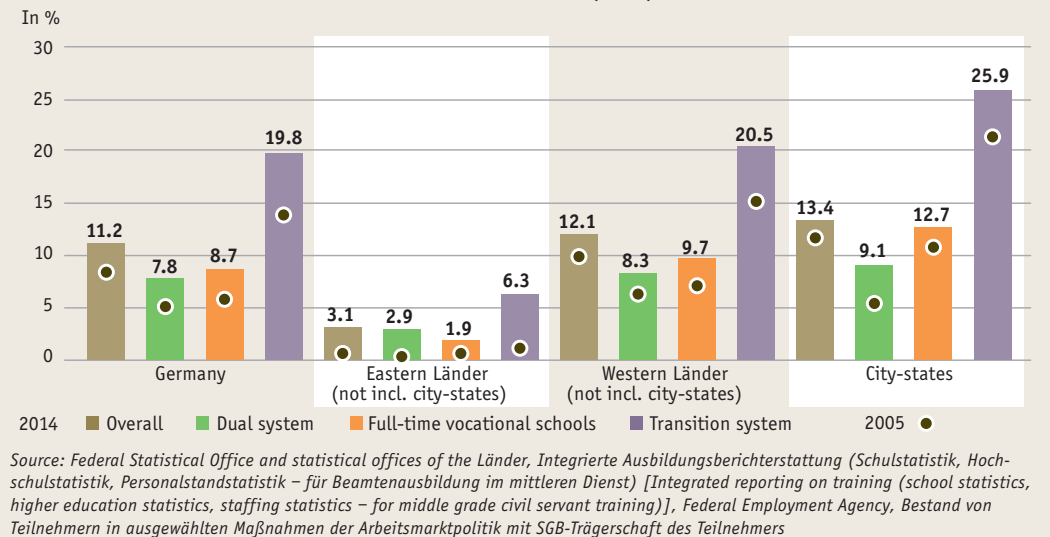
Figure 15: Reading skills of 15-year-olds by migration background and socio-economic status* in 2000 and 2012 (in score points)



There are significant correlations between the German vocabulary levels of school-entry age children and the language they speak at home and number of generations since migration: This makes language teaching at day-care facilities all the more important for children who need to learn the German language within the education system.

Improvement in the knowledge and skills of pupils with a migration background: The knowledge and skills of pupils with migrant backgrounds have improved, particularly at secondary school level. The gap in skills that does exist compared to their contemporaries without a migration background is more closely related to socio-economic factors than the language spoken at home or parents’ countries of birth, for example. The improvement in skills at secondary level is particularly linked to improved performance by young people of migrant background from families with low (and medium) socio-economic status.

Figure 16: Proportion of foreigners among new entrants to the vocational training system by training sector and Land in 2005 and 2014 (in %)



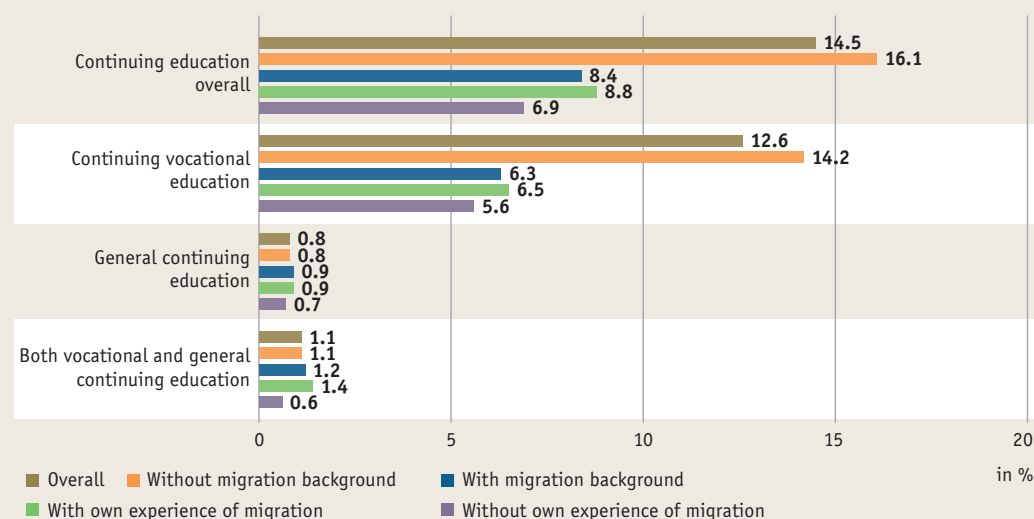
Almost a quarter of trainees in the dual and full-time vocational school systems have migration backgrounds: The share of trainees with a migration background has risen since 2005 to 24% in 2013. The largest proportion originate from European countries outside the EU (Turkey, the west Balkan states and the Russian Federation), and the rest comprises approximately 4% each from the EU15 countries (member states of the EU prior to eastward enlargement in 2004), the other EU28 countries and Asia.

High regional disparities among foreign entrants to vocational training: Among new entrants to vocational education and training, there is very uneven distribution between the regions of Germany, not only persisting between the eastern and western Länder, but also within western Germany including between city-state Länder and Länder with greater urban concentrations on the one hand and Länder with lesser urban concentrations on the other.

Continued significantly lower rates of participation in continuing education among people with a migration background: In 2014, at 8% the level of continuing education uptake among people with migrant backgrounds was only half as much as that by people without migrant backgrounds (16%). The levels are particularly low among people originating from Turkey (4.5%) and the former Yugoslavia (6.6%).

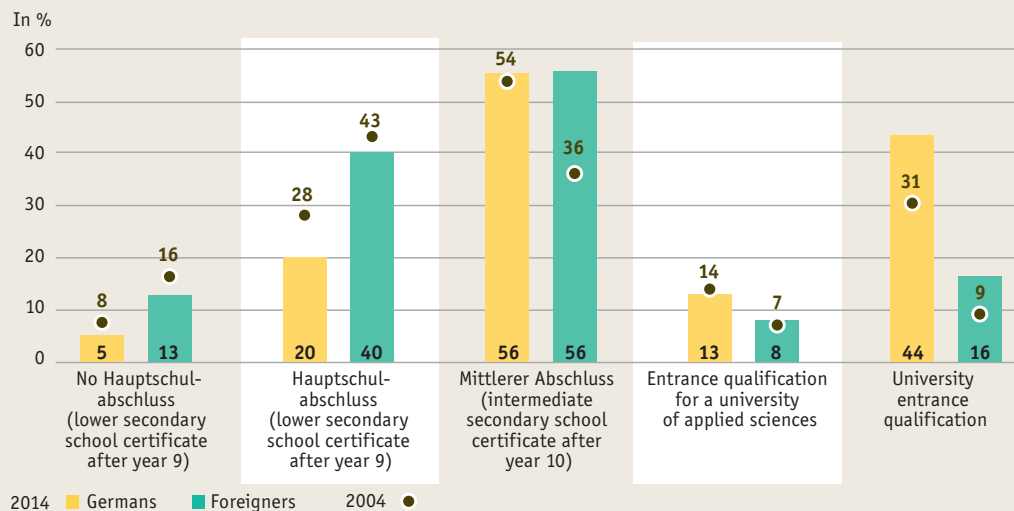
Continuing disparities between young Germans and foreigners in their final school qualifications, but hardly any more differences in higher education: Young foreigners are still more than twice as likely to leave school without a Hauptschulabschluss (lower secondary school certificate) and three times less likely to achieve a higher education entrance qualification. Once they are in the higher education system, however, there are only relatively small differences between students with and without migration backgrounds relating to their further academic progress following completion of their first degrees. In vocational training, up to 50% more training contracts involving foreign trainees are terminated early than those involving Germans.

Figure 17: Participation in continuing education by 15-to-65-year-olds by form of continuing education, migration background and migrant generation (2014) (in %)



Source: Federal Statistical Office and statistical offices of the Länder, Microcensus 2014

Figure 18: German and foreign school-leavers from general and vocational schools by type of school qualification in 2004 and 2014 (as a percentage of the resident population of the relevant age)*



* Related to the average of the resident population (on 31 December of the previous year) at the relevant age (without/with Hauptschulabschluss (lower secondary certificate): 15 to 16 ; Mittlerer Abschluss (intermediate secondary certificate): 16-17; higher education entrance qualification: 18-20). Delayed, multiple counting arises when qualifications are taken by young people going back to school at a more mature age.

Source: Federal Statistical Office and statistical offices of the Länder, school statistics, population statistics, own calculations

Increased staffing levels in child-care groups with high proportions of children with migrant backgrounds: Some Länder provide additional funding for child-care centres if they have children with a migration background or an above-average share of such children. This is reflected in improved staffing ratios in some west German Länder. In particular, the staffing ratio improves in child-care groups with children aged 3 and over the greater the percentage of children there who speak little or no German at home.

Special language tuition at the early childhood stage and in schools an important part of education work: Since 2008, the Länder have committed themselves to implement language teaching as part of the education strategies for child-care facilities. Furthermore, 12 Länder have different remedial language measures for school-entry age children diagnosed as requiring additional teaching. At school level, there is great variation between Länder and between local authorities in the programmes offered for children and adolescents to learn German as a second language. Provision for teaching of German as a second language is made in the teacher training programmes of at least 9 of the 16 Länder.

The recognition of skills and certificates varies between the Länder and there are no formally set recognition procedures: There are as yet no uniform rules about the required German language levels of children and young people. At schools level, the Länder have been making increasing use of the German Language Certificate of the Standing Conference of the Ministers of Education of the Länder since 2012. At higher education level, international students must meet the same requirements as their counterparts who have gone through the education system in Germany. The universities are responsible for decisions on recognition and admission.

Central Challenges

The German education system between expansion and integration

In the past few years, important structural changes have been initiated in many areas of education, including in particular the expansion of early childhood education provision, all-day schools, structural changes at lower secondary school level as well as inclusion of children and young people with disabilities and special educational needs. It was already pointed out in the 2014 national education report that, in all the efforts to effect structural changes, questions of quality and the impact on learning outcomes in particular must not be overlooked. The questions raised two years ago in the previous report remain valid.

The findings presented in this year's report make it clear that large parts of the education system in Germany are confronted by major challenges and demands, be they intended as with the aim of removing social disparities in educational success or justified by long-term trends such as the continuing expansion in education. In addition, new challenges have arisen due to unforeseeable events such as the major increase in the number of people seeking asylum and protection as refugees in Germany. Against this background, the five fields of action that were set out as central challenges in the 2014 report need to be restated: (1) quality assurance in early childhood education, (2) the further development of all-day programmes in schools and after-school care, (3) the organization of the transition from school to vocational training, (4) the relationship between vocational and higher education, and (5) the creation of an inclusive education system. These challenges have become all the more important in the light of current developments.

If one summarizes the findings of this education report across all the educational sectors from a perspective of needs for action in education policy and for education institutions, the following central challenges emerge:

Continued expansion towards higher levels of education and problems at the lower levels of qualification

It is important to note that demand for higher formal qualifications remains high and continues to rise in Germany. The population's education level has continued to rise in the last few decades as more general and vocational qualifications are achieved. The percentage of people with a higher education entrance qualification or a degree has once again risen and is expected to rise even further. By contrast, the numbers of adolescents and young adults who at most obtain a Hauptschulabschluss (lower secondary school qualification) or who enter the labour market without vocational qualifications are still too large, despite positive developments, and have most recently been growing again due to the large numbers of people seeking asylum or recognition as refugees. Furthermore, people from socially less advantaged families and young people with a migration background are over-represented among those who have little or no formal qualifications. It follows that not everyone benefits in equal measure from the effects of increasing educational participation.

Thus in future there needs to be a stronger focus by education policy-makers on those in the population with little or no formal qualifications. In view of the negative long-term effects of a lack of educational qualifications on personal life paths as well as on social integration and participation in cultural life, reducing the number of people with minimal formal qualifications remains one of the central challenges of educational

policy and practice in both general and vocational education. The main priority must be to further substantially reduce the number of young people who leave school without a formal general qualification. In particular, this involves re-designing the interface between the lowest-level secondary school-leaving qualification, training preparation in the “transition system” and vocational training. This interface is given added significance in the light of the high number of people seeking asylum or protection as refugees who have greater need of measures to help them adapt and bridge the gaps in existing qualifications: In order to enable their transition into relevant programmes and measures, it will be particularly important to develop adapted and appropriate possibilities for following up on previous educational progress and thus avoiding dead ends.

Social disparities as a known and continuing structural problem

The issue of social selectivity remains current. This statement has been uncontested and well-documented for a long time and remains one of the most pressing challenges. The fact that the education system in Germany – despite considerable efforts by educational practitioners and policy-makers with some appreciable advances – has still not been able to permanently break the close link between social background and educational success shows that there is a particular need for action to design solutions cutting across all the different areas of education.

The special focus on the situation of people with migration backgrounds in this report once again points out the existence of special problems and where they occur. The integration into German society of refugees seeking asylum and protection, and the special role that the education system and then the employment system will have, will be the central task of everyone in positions of responsibility in the education and training system. This will not just apply to the short term and irrespectively of how such migration develops in the future. There is no disagreement (as the decisions by the Standing Conference of the Länder Ministers of Education show) that extra resources are needed to cope with these new tasks for the education system. The appropriateness of the measures and the maintenance of the applicable standards combined with flexibility in dealing with new migrants will place unprecedented new demands on all those involved which will have repercussions for the existing structures of the current education system. Separate solutions for this section of the population cannot be considered as a permanent approach, even if they are necessary on a temporary basis.

Regional disparities as a known and worsening structural problem

Regional variations are becoming increasingly marked in Germany, and the education system is affected by such uneven development. A first problem with regional disparities is that regions must be defined differently depending on the educational level or sector. Thus, the ‘region’ is to be defined as the local neighbourhood when it comes to early childhood education and primary school but as a much larger area when it comes to secondary school level. For vocational education and training in this context, the focus must be more on structurally connected economic areas where boundaries between Länder need not have any relevance. For higher education, different approaches must be selected according to the type of higher education institution.

The variation in the developments in the individual regions is not only characterized by the presence of educational establishments; in fact, economic and social-structural factors have a far stronger impact. For this reason the influence of the specific regional con-

ditions on the actions of the educational institutions and the teaching staff has particular significance. Recognizing differences and working to offset them remains an increasingly important requirement to be met by all the participants in education policy and practice.

Shifts in the qualifications structure

The trend identified in the 2014 national education report of a shift in the flow of school-leavers towards higher education has proved stable. This has prompted public debate in Germany in the past few years to increasingly focus on the relationship between dual training and higher education. It is essential to continue to make the necessary differentiations in this context and to investigate whether and to what extent new lines of segmentation and social disparities are emerging in relation to vocational training and higher education. It will have to be clarified what consequences this trend has both for vocational training and for the higher education system overall in terms of to what extent new forms of differentiations are emerging in both sectors and leading to new training and education structures: for example dual higher education courses, new opportunities to transfer between the two sectors and new forms of access to higher education. The continued high demand for higher formal qualifications can also present a particular challenge to taking up vocational training, if – at least in some occupational segments – it means that the Abitur (higher education entrance qualification) becomes the basic requirement. The key issue appears to be how to strike a new balance between academic and vocational requirements. Finally, in view of the continuing trend towards higher education study, it appears necessary to closely monitor how the employment and career prospects develop of people who gain different training qualifications.

The problem of the public education system's ability to meet all needs

It takes special efforts to provide learning environments which meet the increasingly heterogeneous qualification requirements and wishes. This includes learning arrangements and materials as well as staff who are qualified to teach, advise and support.

The recent increase in the numbers of (mostly private) initiatives to set up schools and develop programmes of study indicates that the public education infrastructure has problems in meeting needs. Policy-makers, practitioners and researchers in the education sector are all called upon to focus greater attention on this trend. What also needs examining in this context is whether the expansion of private education institutions and efforts by parts of industry to establish specific corporate needs more firmly by founding or being involved in institutions in the tertiary education sector is setting off a dynamic process of ever greater institutional heterogeneity which can lead to a widening of education options, but also to new social segmentation processes in the education system. Paying attention to the processes of increasing institutional heterogeneity will become an important task for all those involved in education in terms of whether the democratic legitimacy and socially integrating function of the education system will be preserved and strengthened.

Migration as a multi-dimensional challenge and opportunity

The social integration of the refugees who have come to Germany to seek protection and asylum as a result of wars and crises represents a major challenge for education and training. Not only are education policy-makers affected but also those involved in social and labour market policy. The current migrant numbers should not result in a temptation to

look at the issue of migration solely in terms of those seeking asylum and refugee status. The challenges involved with the integration of people with a migration background, which have been facing Germany for decades, remain current and are gaining added importance due to the new flow of migration.

The findings under the focal topic provide starting points for overcoming these challenges: The proportion of people with a migration background without any general or vocational qualification has been reduced and the level of knowledge and skills of young people of migrant background has been improved, even if the gap to people without a migration background remains conspicuous.

The positive educational effects are encouraging. At the same time, the continuing educational disparities to people without a migration background must continue to provide an incentive for increased efforts in education. Further findings under the focal topic may also be helpful. Migration background is not an isolated and uniform aspect in education processes, but always interacts with other characteristics, especially the socio-economic situation of the families. The removal of disparities that are specific to migration backgrounds must therefore always include efforts to remove social inequities.

The growing heterogeneity of at least part of the groups of learners in the various education contexts, which is also a result of migration-specific trends, should in future be kept in focus and attention paid to the associated special needs of teaching practice and the training of the teaching staff. The diversity of the migrant population which can be regarded not only as a challenge but also in terms of their potential (in the form of international networks and multilingual skills, for example), indicates that education, family and training policy should develop nuanced approaches within the framework of the regular programmes of the education institutions. The situation of education participants with and without migration backgrounds does not differ fundamentally in this respect. Thus, the challenges posed by migration can lead to benefits for the education and training system as a whole.

The members of the Authoring Group Educational Reporting represent the following institutions:

Deutsches Institut für Internationale Pädagogische Forschung
(DIPF – German Institute for International Educational Research)

Deutsches Jugendinstitut
(DJI – German Youth Institute)

Deutsches Zentrum für Hochschul- und Wissenschaftsforschung
(DZHW – German Centre for Research on Higher Education and Science Studies)

Soziologisches Forschungsinstitut an der Universität Göttingen
(SOFI – Sociological Research Institute)

Federal Statistical Office and statistical offices of the Länder

The German Institute for International Educational Research (DIPF) is responsible for coordination.

