

A critical view on indicator-based educational reporting in Germany

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Educational reporting is a challenge for every country. The OECD publishes the report “Education at a Glance“ on a yearly basis describing the development of the educational systems in 40 countries. Great efforts are put into the development of quantitative, internationally comparable indicators that are suitable for analyzing and comparing the quite different national educational systems. Though fulfilling that purpose, this particular set of indicators alone is clearly unsuitable to illustrate the internal diversity of a single nations educational system. Nevertheless, international, national, and regional indicator sets should be constructed in a compatible or at least comparable way.

Nowadays, continuous educational reporting in Germany is established on a national, federal state, and regional level. The reporting focuses on the development in the last years and the current situation using quantitative indicators. These indicators describe participation, acquisition of competence, degrees and certificates during lifetime. Special aspects and challenges, like immigration, that may have influence on success in the educational system are also taken into account. The indicators are based on the data of official statistics, administrative sources or scientific empirical surveys. A mandatory precondition for all data and indicators is their high quality guaranteed by fulfilling scientific standards and their availability over a long period, e.g. to analyze changes. This kind of educational reporting does not have the objective, to give political action recommendations – but it has the objective to provide a valid basis for them.

The general challenge

In general, educational reporting in Germany faces the challenge that the educational system is under the responsibility of the 16 federal states having the cultural sovereignty. To guarantee equal chances to succeed in the educational system independent of the place of residence, there exists a framework of regulations, which has to be fulfilled by every federal state. These regulations and agreements are coordinated and decided by the The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK). Within the framework the states have freedom of scope. Especially concerning the schools (ISCED 1, 2A, 3A) are considerable differences:

- There are different regulations in the federal states at which age range the children are sent to elementary school.
- The two federal states Berlin and Brandenburg decided that the elementary school encloses six years, whereas in the other federal states the children stay only four years.
- In Berlin, children visiting special schools – like schools for distributed, disabled and learning-disabled children – can reach the same graduations like children in regular schools – in Brandenburg this is barely possible due to another legislation.

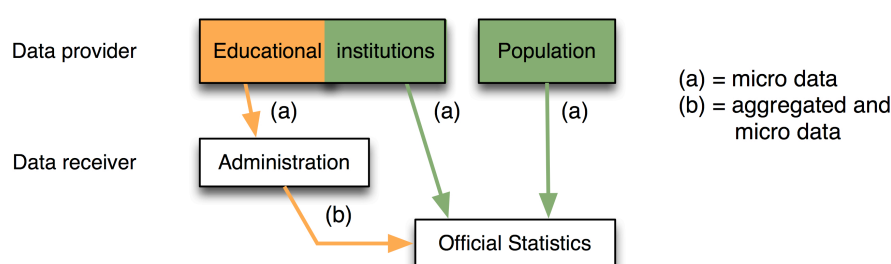
Specific regulations like these make a variety of transformation procedures necessary before national reporting can be started. But, even more important, the acceptance of national reporting is hampered

in the federal states because in several cases reporting results are not directly compatible with their federal regulations.

Data bases: Educational information

Official statistics in Germany receives data concerning educational aspects mainly from educational institutions, the administration and population (see Fig. 1). Currently, none of these data sources alone or linkages between data sources allows the analysis of educational biographies of individuals. This is a big disadvantage particularly with regard to the huge variety of the educational system and with it, the possible educational steps. Therefore education biographies are focused by selective scientific analysis only (inter alia www.uni-bamberg.de/neps) and are not a matter of continuous reporting.

Fig. 1: Availability of data concerning educational aspects for official statistics



Data concerning childhood education, day care participation, vocational training as well as university education are collected by official statistics in all federal states in an equal manner due to national statistical legislation. The micro data provided by the educational institutions cover amongst others all children, youngsters and adults that participate in educational programs at a certain reporting date. In most cases, there is no identifier available to link the data from the last reporting date to the next. Thus, constructing a panel is mostly impossible.

School statistics and the reporting is based on administrative data; that means that due to federal administrative and not statistical legislation these data are collected by administrations and all quality procedures are done there before the data reach official statistics. Depending on the situation in each of the federal states more or less variables are available for official statistics.

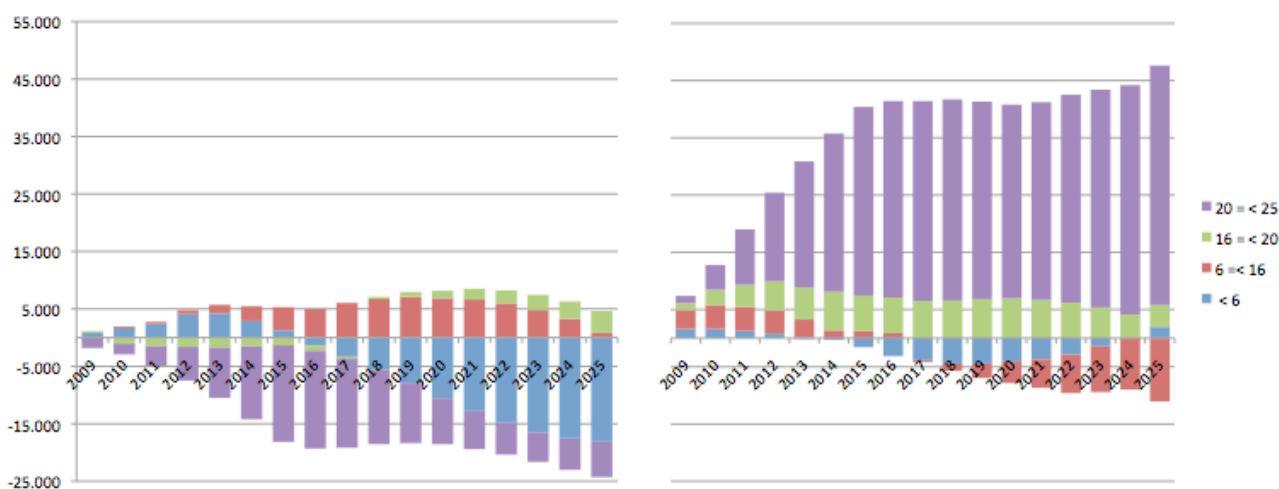
The household survey “micro census” is one of the most powerful databases used in educational analysis – the annual 1% population sample has a big variety of variables for each individual like highest achieved school degree, highest vocational degree, status of employment, financial situation, immigration status, number of children living in the household, education of children, etc.. This survey is available since 1996. The biggest disadvantage is that the sample is too small to be used for detailed regional analysis.

Data bases: Population

Besides the educational data the size of the population and its development, split according to regions and age, is a major factor, for educational planning. To answer questions like “How many children will enter school 2020, how many students university, how many places are needed for vocational training programs, etc.” a population projection must be in place too. The current national coordinated population projection (NCP) is based on the year 2008 making assumptions regarding to three factors – the birth rate, mortality and migration balance. The NCP uses a harmonized set of assumptions and calculations methods for all federal states of Germany. Therefore the results are used if general proposals with regard to Germany are made or federal states are

compared. Furthermore each of the sixteen federal states calculates its own population projection (FPP_i, i=16) using the same factors as the NPCC but different values, especially concerning the factor migration balance¹. The NCPP broken down for each federal state (NCPP_i; i=16) is more or less identical with the total population figure calculated by the federal state. However, depending on the values chosen for calculation in each of the federal states, the age structure of the NCPP_i and FPP_i differ considerably (see Fig. 2).

Fig. 2: Difference federal (FPP) – national projection (NCPP) till 2025 by age group and federal state: (left) Brandenburg, (right) Berlin



The projection in Brandenburg predicts clearly less children younger than 6 years than die NCPP_{BB}. In the sub-cluster of children from 3 to 6 years who attend the childhood education to approx. 95% the difference is nearly 8.000 children or 16% less. Such big differences lead to extremely unequal projections concerning the need of kindergarten places. The projection in Berlin predicts significant more young adults aged 20 to 25 than the NCPP_{BE}. In this case the projection concerning the available capacity of vocational education and training programs and college places is affected.

Conclusions

The legal situation and the available data make consistent educational reporting in Germany on different regional levels at least difficult. Educational pathways and even transitions between educational institutions, from school into vocational training programs or university but also intra-institutional cannot be followed easily. Overall, a discrepancy between the affirmation of the importance of continuous education reporting and the available framework, data and resources to achieve it is seen.

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¹ In this case the migration balance means besides moving abroad also moving into/out of the federal state (internal migration balance).