

Forschungsdatenzentrum

WISSENSCHAFTLICHE EINRICHTUNG DER LÄNDER AN DER HUMBOLDT-UNIVERSITÄT ZU BERLIN E.V.

Tasks and Procedures of the Research Data Centre (Forschungsdatenzentrum, FDZ) at the Institute for Educational Quality Improvement (Institut zur Qualitätsentwicklung im Bildungswesen, IQB)

(as at: 31.01.2019)

This text is a translation of the original German text ("Aufgaben und Verfahrensweise des Forschungsdatenzentrums (FDZ) am Institut zur Qualitätsentwicklung im Bildungswesen (IQB)").

The German text shall prevail in case of doubt or dispute.

1. Tasks

- (1) The Research Data Centre (Forschungsdatenzentrum, FDZ) at the Institute for Educational Quality Improvement (Institut zur Qualitätsentwicklung im Bildungswesen, IQB) archives and documents the German data records from all major national and international school performance studies for the purpose of educational monitoring¹ as well as from national studies containing competence measurements in the field of education and makes them available for scientific re- and secondary analyses.
- (2) The FDZ at the IQB follows the recommendations of the German Data Forum² (Rat für Sozial- und Wirtschaftsdaten, RatSWD) in the fulfilment of its tasks.
- (3) After five years of initial financing by the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF), the FDZ at the IQB has been financed since October 2011 by the Centre for International Student Assessment (Zentrum für international Bildungsvergleichsstudien, ZIB), which is funded by the Federal Government and the German federal states (*Länder*).

2. Submission of data to the FDZ at the IQB

(1) The data is transferred to the FDZ at the IQB by the data providers. The data

¹ A full list of the large national and international school performance studies for the purpose of educational monitoring disposable at the FDZ at the IQB is available at http://www.iqb.hu-berlin.de/fdz/Daten/Bildungsmonitoring.

² www.ratswd.de

providers ensure compliance with any funding and licensing requirements that may exist. Data providers (if necessary with the support of the FDZ at the IQB) ensure that the data records are made anonymous in accordance with data protection regulations. As a rule, the data sets should be made available for reand secondary analyses in the FDZ at the IQB three years after data collection. The data records from the large national and international school performance studies for the purpose of educational monitoring (see footnote 1) are normally submitted to the FDZ at the IQB two years after publication of the respective results report.

- (2) Any existing documentary material is submitted to the FDZ at the IQB in full. This typically comprises a handbook of scales, a technical report, a description of the study design and further materials relating to the collecting and scaling of the data, provided that legal provisions do not preclude the transfer. The FDZ at the IQB advises on data documentation and provides information material on the FDZ homepage.³ The FDZ at the IQB is under obligation not to make protected documentation materials and instruments accessible.
- (3) Metadata are generated at the IQB's FDZ to describe the research data in more detail. This metadata is fed into publicly accessible databases by the IQB's FDZ and can be found, among others, at the Registration agency for social and economic data da|ra (Registrierungsagentur für Sozial- und Wirtschaftsdaten da|ra), in the Web of Science Data Citation Index and in various repositories.
- (4) With the publication of the data, a Digital Object Identifier (DOI) is assigned to the respective study so that it can be cited unambiguously. Users of the data are contractually obliged by the FDZ at the IQB to cite the data package in all publications for which they use it, indicating this DOI and stating the authors.
- (5) When submitting their data, the data providers may name specific research questions which they are still working on (restriction notes). These questions are protected for up to two years after the transfer of the data. This means that applicants can only address these specific questions after the expiration of the blocking period. With the documentation of the data in the FDZ at the IQB, a binding list of the questions still blocked is drawn up, specifying the deadlines, and issued on request to scientists who wish to apply for access to the respective study.
- (6) The data providers name a contact person who will be available to answer any queries relating to the data.
- (7) The data submitted are further documented in the FDZ at the IQB and are prepared for re- and secondary analyses.

3. Application for data use

(1) Scientists may apply to the FDZ at the IQB for scientific and non-commercial use of archived data. Commercial use is not permitted.

(2) Applicants have to submit a research proposal approx. two to five pages in length which specifies the planned research questions and analyses.⁴ On the basis of this application and the criteria mentioned in Section 4, Paragraph 1, the FDZ at

³ For further information see http://www.iqb.hu-berlin.de/fdz/Datenuebergabe.

⁴ Resolution of the 47th Chiefs of Staff Commission for Quality Assurance in Schools (Amtschefskommission "Qualitätssicherung in Schulen") Item 3 (Part 4)

the IQB examines whether access to the data can be granted. As the data providers are generally those who are most familiar with the contractual provisions relevant to the studies, the FDZ at the IQB reserves the right to include them in the assessment process on a case-by-case basis.

This general procedure is normally applied to data records which have not been collected for the purpose of educational monitoring on behalf of the federal states (*Länder*), even if the request for data use includes access to the federal state identifier variable. This is without prejudice to any special regulations which have been laid down for the respective data set by its owners or producers.

For data records from the large national and international school performances studies collected for the purpose of educational monitoring, the general procedure described above is applied in the following cases:

- 1. Dealing with the research question does not require access to the federal state identifier variable.
- 2. Dealing with the research question does require access to the federal state identifier variable, which, however is requested exclusively to replicate an already published comparison between German federal states (*Länder*).
- Dealing with the research question requires access to the federal state identifier variable, which, however, is requested exclusively for controlling purposes in order to include it as a covariate in the projected analyses. The identification of individual federal states in the presentation of results is contractually excluded.
- 4. Dealing with the research question requires access to the federal state identifier variable, which, however, is requested exclusively to import context characteristics or other third-party variables. The identification of individual federal states in the presentation of results is contractually excluded.
- 5. Dealing with the research question requires access to the federal state identifier variable, which, however, is requested exclusively to compare aggregated groups of federal states (*Länder*). Each group must consist of at least two federal states and be compiled according to criteria that are significant in terms of content. The identification of individual federal states in the presentation of results is contractually excluded.
- 6. Dealing with the research question requires access to the federal state identifier variable, which, however, is required exclusively to describe the sample (e.g., the distribution of study participants across the German federal states [*Länder*] and across school types within federal states [*Länder*]).
- (3) Applications for the use of data from the large national and international school performance studies for the purpose of educational monitoring with representative samples at federal state level containing novel comparisons across German federal states (*Länder*)⁵ must be accompanied by a project proposal of a maximum of 20 pages, which conforms to the requirements of such applications as resolved by the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz, KMK)⁶. In this case the

⁵ Data use applications for novel *Länder* comparisons may only refer to such national school performance studies and national supplements to international school performance studies that have samples representative at federal state level and that were commissioned by the German federal states (*Länder*) (see the list available at http://www.iqb.hu-berlin.de/fdz/Datenzugang/SUF-Antrag/neuLVs).

⁶ See number 2 of the Procedure for the decision of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder on applications for the use of data for novel comparisons across German federal states (*Länder*), available at http://www.iqb.hu-berlin.de/fdz/20190131 FDZ Ver 3.pdf.

application will be reviewed for compliance with the formal criteria and subjected to a scientific review procedure based on the guidelines of the Deutsche Forschungsgemeinschaft (DFG).

4. Prerequisites for data use

- (1) In principle, an application for the use of data provided at the FDZ at the IQB is to be approved if
 - 1. the intended use is scientific and non-commercial,
 - 2. the data protection of the persons concerned is respected,
 - 3. the planned analyses do not run counter to the contractual agreements with the data owners of the study (e.g. the KMK),
 - 4. the analyses do not conflict with current restriction notes (see Section 2.(5)), and
 - 5. no other contradictory reasons exist.
- (2) In the case of applications for use which relate to data from the large national and international school performance studies for the purpose of education monitoring with representative samples at federal state level (see footnote 5) and which intend to use these data to deal with novel questions in a comparison across federal states, approval by the KMK is required in addition to the examination of the criteria specified in paragraph (1) (see Section 3.(3)). In the case of federal state comparisons or analyses concerning federal states which are merely replications of already published results, such an FDZ-external examination is not required (see Section 3.(2)).
- (3) If the FDZ at the IQB reaches the conclusion during the application review that the requirements for data access pursuant to paragraph (1) are met, the use of the data shall be governed by a contractual agreement between the FDZ at the IQB and the applicant. The FDZ at the IQB reserves the right to include conditions and other provisions to be observed when using the data in the agreement. The data may only be used to answer the research questions outlined in the application.
- (4) In the interests of good scientific practice the applicant undertakes to explicitly mention the sources of the instruments and data in his or her own publications (i.e. to cite the data records used, stating their authors and the DOI) and to send special prints or specimen copies of the resulting publications to the FDZ at the IQB immediately after publication (for the purpose of documenting the work).

5. Form of data use

(1) As a rule, access to data is granted by the handover of password-protected Scientific Use Files.

(2) Unprotected storage of data is not permitted. Provisions for the storage, transport and sharing of the data are regulated in the data use agreements.

⁷ See the Procedure for the decision of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder on applications for the use of data for novel comparisons across German federal states (*Länder*), available at http://www.iqb.hu-berlin.de/fdz/20190131_FDZ_Ver_3.pdf.

⁸ Resolution of the 47th Chiefs of Staff Commission for Quality Assurance in Schools Item 3 (Part 4)

- (3) In the case of the use of the federal state identifier variable as well as the use of variables with a low degree of anonymisation, the transmission of Scientific Use Files is not possible. In such cases, the FDZ at the IQB allows the use of guest workplaces to work with these data in the FDZ at the IQB, subject to availability. The outputs are checked at the IQB's FDZ for compliance with the respective agreements and are then transferred electronically to the researcher in a password-protected form.
- (4) For the handling of data that cannot be made available in the Scientific Use Files, researchers may use the remote computing system JoSuA provided by the Institute of Labor Economics (Forschungsintitut zur Zukunft der Arbeit, IZA) in Bonn as an alternative to guest access on site at the IQB's FDZ. Analyses results that are to be used in publications or presentations are checked at the IQB's FDZ for compliance with the respective agreements and then made available to the researcher via a secure transmission channel.
 - (5) Records stored on data carriers of any kind may only be brought to countries that have an appropriate level of data protection. Countries that provide an appropriate level of data protection are: a) EU member states; b) European Economic Area (EEA) states: Norway, Liechtenstein and Iceland, and c) countries for which the European Commission has released an adequacy decision. An updated list is maintained on the European Commission's website. Data users who are located in countries that do not have an appropriate level of data protection at the time of application will not be provided with Scientific Use Files but will be given the opportunity to use the JoSuA remote computing system.
 - (6) In addition to Scientific Use Files and the remote computing system JoSuA, reduced and absolutely anonymised data sets (Campus Files) are available for individual studies for use in university teaching. In comparison to Scientific Use Files, these data sets have a higher degree of anonymisation and are made available after agreement to specific terms of use⁹.

Translated into English with www.DeepL.com/Translator

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⁹ The Usage Regulations for Campus Files of the FDZ at the IQB are available for download at http://www.iqb.hu-berlin.de/fdz/Datenzugang/CF-Antrag/NutzungsordnungCFs.