









Varieties of Political Indoctrination in Education and the Media (V-Indoc)

Codebook

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1 Introduction

The Varieties of Indoctrination (V-Indoc) dataset contains indices and indicators of indoctrination in education and media around the world. It is constructed based on an expert survey fielded in collaboration with V-Dem and led by the ERC-funded project "Democracy under Threat: How Education can Save it" (DEMED). The dataset contains indices and indicators that measure indoctrination efforts in education and the media across 160 countries from 1945 to 2021. The indices capture broad dimensions of indoctrination such as indoctrination potential and indoctrination content, while the indicators cover topics related to the curriculum, teachers, schools, and the media.

The principal investigators are Anja Neundorf, Eugenia Nazrullaeva, Ksenia Northmore-Ball, Katerina Tertytchnaya, and Wooseok Kim. For more information, please visit https://www.gla.ac.uk/research/az/democracyresearch/.

The Varieties of Democracy (V-Dem) Institute provided the use of its infrastructure for the data collection, and processed the surveys using the standard V-Dem measurement modeling and quality control processes. To learn more about V-Dem, please visit https://www.v-dem.net.

1.1 Cautionary Notes

Both V-Indoc and V-Dem are firmly committed to full transparency and data sharing. We ask users to take the following cautions into consideration when using the dataset.

- While the V-Dem Methodology assumes five or more coders for the "contemporary" period, some observations in the V-Indoc dataset are rated by less than five country-experts as this was the first round of data collection for the V-Indoc dataset. We urge users to exercise caution when working with observations that were rated by fewer than five experts, and to pay careful attention to estimates of uncertainty around the point estimates that we provide for each observation. We strongly advise against using point estimates for country-year observations that were rated by less than three experts, and suggest filtering these observations before conducting any type of analysis. For this purpose, we provide coder-count variables for expert-coded indices and indicators, which are suffixed with "_mr" and "_nr", respectively.
- Point estimates can jump around slightly due to the simulation-based nature of the estimation process and expert turnover. Consumers of the data should therefore always be attentive to the uncertainty about the estimates, which provides vital information about the degree to which one can be certain that a change in scores reflects an actual change in the level of the concept being measured.

1.2 Suggested Citation

Nota bene: If a variable drawn from the V-Indoc dataset plays an important role in your project (published or unpublished), please use the applicable citations below:

• V-Indoc Dataset:

Neundorf, Anja, Eugenia Nazrullaeva, Ksenia Northmore-Ball, Katerina Tertytchnaya, Wooseok Kim, Aaron Benavot, Patricia Bromley, Carl Henrik Knutsen, Philipp Lutscher, Kyle Marquardt, Agustina Paglayan, Dan Pemstein, Brigitte Seim, and Oskar Rydén. 2023. "Varieties of Political Indoctrination in Education and the Media (V-Indoc) Dataset V1." DEMED Project. URL: http://dx.doi.org/10.5525/gla.researchdata.1397

• V-Indoc Codebook:

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• V-Indoc Introduction:

Neundorf, Anja, Eugenia Nazrullaeva, Ksenia Northmore-Ball, Katerina Tertytchnaya, and Wooseok Kim. 2023. "Varieties of Indoctrination (V-Indoc): Introducing a Global Dataset on the Politicization of Education and Political Communication." V-Dem Working Paper 136.

• V-Dem Methodology:

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Kyle L. Marquardt, Juraj Medzihorsky, Daniel Pemstein, Nazifa Alizada, Lisa Gastaldi, Garry Hindle, Josefine Pernes, Johannes von Römer, Eitan Tzelgov, Yi-ting Wang, and Steven Wilson. 2022. "V-Dem Methodology v12." Varieties of Democracy (V-Dem) Project.

• V-Dem Measurement Model:

Pemstein, Daniel, Kyle L. Marquardt, Eitan Tzelgov, Yi-ting Wang, Juraj Medzihorsky, Joshua Krusell, Farhad Miri, and Johannes von Römer. 2022. "The V-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data." V-Dem Working Paper 21.

• V-Dem Country Coding Units:

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, and Lisa Gastaldi. 2022. "V-Dem Country Coding Units v12." Varieties of Democracy (V-Dem) Project.

• V-Dem Organization and Management:

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Nazifa Alizada, Lisa Gastaldi, Sandra Grahn, Garry Hindle, Nina Ilchenko, Natalia Natsika, Josefine Pernes, and Johannes von Römer. 2022. "V-Dem Organization and Management v12." Varieties of Democracy (V-Dem) Project.

1.3 Variable Information

1.3.1 Variable Types

The V-Indoc Codebook divides variables into the following variable types:

• Type C: Variables coded by Country Experts

A Country Expert is typically a scholar or professional with deep knowledge of a country and of a particular political institution. Furthermore, the expert is usually a citizen or resident of the country. Multiple experts (usually 5 or more) code each variable.

• Type D: Indices

Variables composed of type C variables. This data may be accomplished by, for example, aggregating variables into larger concepts (e.g., indices of indoctrination).

1.3.2 Variable Versions and Suffixes

The V-Indoc dataset contains several versions of the variables coded by country experts (type C variables).

• Model Estimates

"Model Estimates" — Measurement Model Output:

This version has no special suffix (e.g. v2edcritical). This version of the variables provides country-year (country-date in the alternative dataset) point estimates from the V-Dem measurement model (see Pemstein et al. 2022). The measurement model aggregates the ratings provided by multiple country experts and, taking disagreement and measurement error into account, produces a probability distribution over country-year scores on a standardized interval scale (see the V-Dem Methodology document). The point estimates are the median values of these distributions for each country-year. The scale of a measurement model variable is similar to a normal ("Z") score (e.g. typically between -5 and 5, with 0 approximately representing the mean for all country-years in the sample) though it does not necessarily follow a normal distribution. For most purposes, these are the preferred versions of the variables for time series regression and other estimation strategies.

"Model Estimates Measure of Uncertainty" — Measurement Model Highest Posterior Density (HPD) Intervals:

This version has the suffixes: "codelow" and "codehigh" (e.g. v2edcritical_codelow and v2edcritical_codehigh). These two kinds of variables ["codelow" and "codehigh"] demarcate the interval in which the measurement model places 68 (or 95) percent of the probability mass for each country-year score, which is approximately equivalent to one (or two) standard deviation upper and lower bounds. If the underlying posterior distribution is skewed, the HPDs reflect this with unequal distances between the point estimate and the high and low estimates. We also provide a standard calculation for standard deviation which is marked with the suffix "sd" (e.g., v2edcritical_sd). The SD might be used to compute the standard frequentist confidence intervals.

• Original Scale (*_osp)

"Original Scale" — Linearized Original Scale Posterior Prediction:

This version has the suffix "_osp," (e.g. v2edcritical_osp). In this version of the variables, we have linearly translated the measurement model point estimates back to the original ordinal scale of each variable (e.g. 0-4 for v2edcritical_osp) as an interval measure. The decimals in the osp version roughly indicate the distance between the point estimate from the linearized measurement model posterior prediction and the threshold for reaching the next level on the original ordinal scale. Thus, a osp value of 1.25 indicates that the median measurement model posterior predicted value was closer to the ordinal value of 1 than 2 on the original scale. Technically, it calculates the sum of the posterior probabilities that the estimate is in a particular category: If a particular country-year-variable has a probability of 90% to be in category "4", a 10% probability of being in category "3", and 0% probability of being in categories "2", "1", and "0", the result is a value of 3.9 (4 * 0.9 + 3 * 0.1 = 3.6 + 0.3). Since there is no conventional theoretical justification for linearly mapping ordinal posterior predictions onto an interval scale, these scores should primarily be used for heuristic purposes. Using the "Ordinal Scale" estimates—or incorporating the properties of ordinal probit models into the estimation procedure—is thus preferable to using the osp estimates in statistical analyses. However, since the osp version maps onto the coding criteria found in the V-Indoc Codebook, and is strongly correlated with the Measurement Model output (typically at .98 or higher), some users may find the osp version useful in estimating quantities such as marginal effects with a clear substantive interpretation. If a user uses _osp data in statistical analyses it is imperative that she confirm that the results are compatible with estimations using Measurement Model output.

"Original Scale Measure of Uncertainty" — Linearized Original Scale HPD Intervals: This version has the suffixes "codelow" and "codehigh" (e.g. v2edcritical_osp_codelow and v2edcritical_osp_codehigh). We estimate these quantities in a similar manner as the Measurement Model Highest Posterior Density Intervals. These two variables ["codelow" and "codehigh"] demarcate the interval in which the measurement model places 68 (or 95) percent of the probability mass for each country-year score, which is approximately equivalent to one

(or two) standard deviation upper and lower bounds. If the underlying posterior distribution is skewed, the HPDs reflect this with unequal distances between the point estimate and the high and low estimates. We also provide a standard calculation for standard deviation which is marked with the suffix "sd" (e.g., v2edcritical_sd). The SD might be used to compute the standard frequentist confidence intervals.

• Ordinal Scale (*_ord)

"Ordinal Scale" — Measurement Model Estimates of Original Scale Value:

This version has the suffix "_ord" (e.g. v2edcritical_ord). This method translates the measurement model estimates back to the original ordinal scale of a variable (as represented in the Codebook) after taking coder disagreement and measurement error into account. More precisely, it represents the most likely ordinal value on the original codebook scale into which a country-year would fall, given the average coder's usage of that scale. More specifically, we assign each country-year a value that corresponds to its integerized median ordinal highest posterior probability category over Measurement Model output.

"Ordinal Scale Measure of Uncertainty" — Original Scale Value HPD Intervals:

This version has the suffixes - "codelow" and "codehigh" (e.g. v2edcritical_ord_codelow and v2edcritical_ord_codehigh). We estimate these values in a similar manner as the Measurement Model Highest Posterior Density Intervals. These two variables ["codelow" and "codehigh"] demarcate the interval in which the measurement model places 68 percent of the probability mass for each country-year score, which is approximately equivalent to one standard deviation upper and lower bounds. If the underlying posterior distribution is skewed, the HPDs reflect this with unequal distances between the point estimate and the high and low estimates. We also provide a standard calculation for standard deviation which is marked with the suffix "sd" (e.g. v2edcritical_sd). The SD might be used to compute the standard frequentist confidence intervals.

• Number of Coders per Country, Index and Year (*_mr)

The mean number of Country Experts (regular coders, bridge- and lateral coders) who provided data for the indicators that comprise each index. By providing the number of Country Experts for each index observation, we suggest that users primarily base analyses on observations based on an average of three or more coders. We strongly advise against using observations with less than three coders. This concerns all D type variables, and is included in the country-year dataset.

• Number of Coders per Country, Indicator and Year/Date (*_nr)

The number of Country Experts (regular coders, bridge- and lateral coders) who provided data for the indicators. By providing the number of Country Experts for each indicator observation, we suggest that users primarily base analyses on observations based on three or more coders. We strongly advise against using observations with less than three coders. This concerns all C type variables.

• Arithmetic Mean of Coder Answers per Country-Year (*_mean)

It is commonplace to aggregate respondents' data to the level of country or country-year using arithmetic mean in order to merge it with other country-level data. Such variables are provided for every expert-coded variable aggregated by the Measurement Model in Country-Date/Year dataset.

1.3.3 Variable Entry Clarifications

The following information is available per variable (if applicable):

Additional versions: Indicates if the variable is also available in the following versions; *_osp, *_ord, *_codelow, *_codehigh, *_sd, *_mean, *_mr and/or *_nr. Detailed information about the different versions can be found in section 1.3.2 (Variable Versions and Suffixes).

Available versions: Lists the available variable types (Only applicable for ordinalized versions of indices).

Question: The question that the variable attempts to measure.

Clarification: Definition of key terms, clarification of scope-conditions, contexts, and any other features needed to understand the question (if any). Key definitions specific to a single section appear in the introduction to that section or in the clarifications for particular questions. General instructions and key definitions for coders are presented in the Appendix.

Responses: Numeric, Percentage, Text, Date, Countries, or specific response categories (listed below under "Answer-types" and "Scales").

Answer-Types:

Multiple-choice: Where a coder can select only one answer. This is the usual protocol and is therefore not noted.

Multiple-selection: Where a coder can select more than one answer. For most multiple-selection variables, the dataset contains both the original variable as well as a set of dummies for each of the responses.

Ordering (only applicable to a selection of C variables): This relates to the ordering of questions when the coding of one indicator depends upon the coding of other indicators (*i.e.*, whenever there is some alteration of the serial ordering of questions as listed in this document).

Aggregation (only applicable to indices): Explanation of how an index is constructed.

Scale: Dichotomous, Nominal, Ordinal, or Interval/Ratio (Extra response options such as N/A or Other, are not counted as part of this classification).

Cross-Coder Aggregation (only applicable to C variables): IRT, Bayesian ordinal item response theory measurement model (see the *V-Dem Methodology* document). Available in mode and mean.

Data releases: Indicates release, which is currently 1 for all V-Indoc variables and indices.

Sources: Composite indices (type-D) build on other variables in the V-Indoc data set, which are therefore listed as the source for that index.

Notes: Additional information about the variable.

Cleaning: Specifies if observations are set to missing based on values from other variables.

Convergence: The V-Dem methodology assesses convergence among expert-coded variables using the Gelman-Rubin Diagnostic. Specifically, we consider a variable to have converged if no more than 5% of parameters in each of the relevant parameter sets (universal thresholds, main-country-coded thresholds, expert thresholds, expert reliability, and country-date latent trait estimates) has $\hat{R} \geq 1.01$. We assess BFA convergence in a similar manner across relevant model parameter sets (intercept, slope, measurement standard error, and country-date latent trait estimates), but using $\hat{R} \geq 1.1$. We provide convergence information for a given variable only if a set of model parameters did not converge, reporting these set(s). Note that if country-date latent trait

estimates converged (i.e. we do not mention them in the convergence details) it means that the convergence issues likely reflect a problem with model parameter identification, and the latent trait estimates are relatively safe.

Years: Available coverage for the respective variable. For more information on country-specific year coverage, see *the country table*.

Notes: Additional information about the variable.

1.4 Notes on Methodology

1.4.1 Index Aggregation

Note: Indices that have three or more components are aggregated using Bayesian factor analysis that use the posterior samples of these components. Indices that have two components are aggregated using averaging.

1.4.2 Country-Year Aggregation

C-variables are aggregated from the country-date level to the country-year level using day-weighted means.

1.4.3 Open Source Code

The code V-Dem uses to create datasets can be accessed at https://github.com/vdeminstitute/dataset_construction.

1.5 Country Units

The following table contains all country units (and their year coverage) that are included in the V-Indoc dataset. The possible years for this dataset is 1945-2021.

Name	ID	Coverage	Name	ID	Coverage
Afghanistan	36	1945-2021	Gabon	116	1945-2021
Albania	12	1945 – 2021	Georgia	118	1990 – 2021
Angola	104	1945 – 2021	Germany	77	1949 – 2021
Argentina	37	1945 – 2021	Ghana	7	1945 – 2021
Armenia	105	1990 – 2021	Greece	164	1945 – 2021
Australia	67	1945 – 2021	Guatemala	78	2010 – 2021
Austria	144	1945 – 2021	Guinea	63	1945 – 2021
Azerbaijan	106	1990 – 2021	Guinea-Bissau	119	1945 – 2021
Bahrain	146	1945 – 2021	Guyana	166	1945 – 2021
Bangladesh	24	1971 – 2021	Haiti	26	1945 – 2021
Belarus	107	1990 – 2021	Honduras	27	1945 – 2021
Belgium	148	1945 – 2021	Hong Kong	167	1945 – 2021
Benin	52	1945 – 2021	Hungary	210	1945 – 2021
Bhutan	53	1945 – 2021	Iceland	168	1945 – 2021
Bolivia	25	1945 – 2021	India	39	1945 – 2021
Bosnia and Herzegovina	150	1992 – 2021	Indonesia	56	1945-2021
Botswana	68	1945 – 2021	Iran	79	1945 - 2021
Brazil	19	1945 – 2021	Iraq	80	1945-2021
Bulgaria	152	1945 – 2021	Ireland	81	1970-2021
Burma/Myanmar	10	1945-2021	Israel	169	1948-2021
Burkina Faso	54	1947 - 2021	Italy	82	1945-2021
Burundi	69	1945-2021	Ivory Coast	64	1945-2021
Cambodia	55	1945-2021	Jamaica	120	1945-2021
Cameroon	108	1961 - 2021	Japan	9	1945-2021
Canada	66	1945-2021	Jordan	83	1945-2021
Central African Republic	71	1945-2021	Kazakhstan	121	1990-2021
Chad	109	1945-2021	Kenya	40	1945-2021
Chile	72	1945-2021	Kosovo	43	1999-2021
China	110	1945-2021	Kuwait	171	1945-2021
Colombia	15	1945-2021	Kyrgyzstan	122	1990-2021
Costa Rica	73	1945–2021	Laos	123	1945–2021
Croatia	154	1991–2021	Latvia	84	1990-2021
Cyprus	156	1945–2021	Lebanon	44	1945–2021
Czechia	157	1945–2021	Lesotho	85	1945–2021
Democratic Republic of the Congo	111	1945–2021	Liberia	86	1945–2021
Denmark	158	1945–2021	Libya	124	1951–2021
Djibouti	113	1945–2021	Lithuania	173	1990–2021
Ecuador	75	1945–2021	Luxembourg	174	1945–2021
Egypt	13	1945–2021	Malawi	87	1945-2021
El Salvador	$\frac{13}{22}$	1945-2021	Malaysia	177	1945-2021
Equatorial Guinea	$\frac{22}{160}$	1945-2021	Maldives	88	1945-2021
Estonia Estonia	160	1945-2021 1990-2021	Mali	28	1945–2021
Eswatini	132	1945-2021	Mauritius	180	1945–2021
Ethiopia	$\frac{132}{38}$	1945–2021 1945–2021	Mexico	3	1945–2021
_	38 162	1945–2021 1945–2021	Moldova	3 126	1945-2021
Fiji Finland	$162 \\ 163$	1945–2021 1945–2021		89	1990-2021
		1945-2021 1945-2021	Mongolia Montonogra		
France	76	1940-2021	Montenegro	183	1998-2021

Name	ID	Coverage	Name	ID	Coverage
Morocco	90	1945-2021	United Arab Emirates	207	1971-2021
Mozambique	57	1945 - 2021	United Kingdom	101	1945 – 2021
Namibia	127	1945 – 2021	United States of America	20	1945 – 2021
Nepal	58	1945 – 2021	Uruguay	102	1945 – 2021
Netherlands	91	1945 - 2021	Uzbekistan	140	1990-2021
New Zealand	185	1945 - 2021	Venezuela	51	1945 - 2021
Nicaragua	59	2017 - 2021	Vietnam	34	1945 - 2021
Niger	60	1945 - 2021	Yemen	14	1945 - 2021
Nigeria	45	1945 - 2021	Zambia	61	1945 - 2021
North Korea	41	1945 - 2021	Zanzibar	236	1945 - 2021
North Macedonia	176	1991-2021	Zimbabwe	62	1945 – 2021
Norway	186	1945 - 2021			
Pakistan	29	1947-2021			
Palestine/West Bank	128	1948-2021			
Papua New Guinea	93	1945-2021			
Paraguay	189	1945-2021			
Peru	30	1945-2021			
Philippines	46	1945–2021			
Poland	17	1945–2021			
Portugal	21	1945–2021			
Qatar	94	1945-2021			
Romania	190	1945–2021			
Russia	11	1945-2021			
Rwanda	129	1945–2021			
Saudi Arabia	197	1945–2021			
Senegal	31	1945-2021			
Serbia	198	1945-2021			
Seychelles	199	1945–2021			
Sierra Leone	95	2000–2021			
Singapore	200	1945–2021			
Slovakia	200	1993–2021			
Slovenia	$\frac{201}{202}$	1989–2021			
Somalia	130	1945–2021			
Somaliland	130	1945-2021			
South Africa	8	1945-2021			
South Korea	42	1945 - 2021 $1945 - 2021$			
South Rolea South Sudan	32	2011–2021			
Spain Sudan	96	1945–2021			
Sri Lanka	131	1945-2021			
Sudan	33	1945-2021			
Sweden					
Switzerland	5 6	1945-2021			
	6	1945-2021			
Syria	97 48	$1945 – 2021 \\ 1945 – 2021$			
Taiwan					
Tajikistan Tangania	133	1990-2021			
Tanzania Thailand	47	1945-2021			
Thailand The Cambia	49	1945-2021			
The Gambia	117	1945-2021			
Togo	134	1945-2021			
Trinidad and Tobago	135	1945-2021			
Tunisia Tunkay	98	1945-2021			
Turkey	99 126	1945-2021			
Turkmenistan	136	1990-2021			
Uganda	50	1945-2021	TD-4-1 1	100	
Ukraine	100	1990-2021	Total number of countries	160	

1.6 Identifier Variables in the V-Indoc Datasets

1.6.1 Country Name (country_name)

Name of coded country. A V-Dem country is a political unit enjoying at least some degree of functional and/or formal sovereignty. For more details on country units consult the V-Dem *Country Coding Units* document.

Response: Text.

1.6.2 V-Dem Country ID (country_id)

Unique country ID designated for each country. A list of countries and their corresponding IDs used in the V-Dem dataset can be found in the country table in the codebook, as well as in the V-Dem Country Coding Units document.

Response: Numeric.

1.6.3 Country Name Abbreviation (country_text_id)

Abbreviated country names.

Response: Text.

1.6.4 Year (year)

V-Indoc year coded annually from 1945-2021. This variable is included in the V-Indoc Country Year as well as Country Date datasets.

Response: Date.

1.6.5 Historical Date (historical_date)

This variable is included in the V-Indoc Country Date dataset. The default date is December 31st, as in 2021-12-31, referring to the time span from 01-01 to 12-31 in a respective year. Additionally, specific changes, such as the appointment of a Head of State, are coded on the specific date within a certain year. Thus, a code can change within a year, and will be reflected in the 12-31 date.

Response: Date.

2 V-Indoc Indices

2.1 Indoctrination potential in education (D) (v2xed_ed_inpt)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: How strong is the potential for indoctrination in education?

Clarification: The potential of regimes to successfully indoctrinate through education is based on their control over the structures and processes of the education system. The index is a function of the coherence of the regime's doctrine (whether it be democratic or autocratic) and the effort devoted to political education. Greater coherence and political education efforts are expected to generate higher potential for indoctrination.

Scale: Interval, from low to high (0-1).

Source(s): v2xed_ed_poed v2xed_ed_inco

Data release: 1.

Aggregation: We estimate the index by averaging two indices: v2xed_ed_poed and v2xed_ed_inco.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.2 Political education effort in education (D) (v2xed_ed_poed)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: Are political values and ideology emphasized in education?

Clarification: This index measures the extent to which the regime attempts to teach its core political values and ideologies through education based on political education in primary and secondary schools, and the teaching of a dominant ideology in the history curriculum.

Scale: Interval, from low to high (0-1).

Source(s): v2edpoledprim v2edpoledsec v2edideol

Data release: 1.

Aggregation: We estimate this index by taking the point estimates from a Bayesian factor analysis model of the indicators: v2edpoledprim v2edpoledsec v2edideol.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.3 Indoctrination coherence in education (D) (v2xed ed inco)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: How coherent are the means of indoctrination in education?

Clarification: This index measures the extent to which a coherent single doctrine of political values and model citizenship is known and promoted by educational agents. The index is a function of the centralization of the education system and the regime's control over educational agents. Greater centralization and control are expected to lead to a more coherent doctrine being taught through education.

Scale: Interval, from low to high (0-1).

Source(s): v2xed ed ctag v2xed ed cent

Data release: 1.

Aggregation: We estimate the index by averaging two indices: v2xed_ed_cent and v2xed_ed_ctag.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.4 Centralization of the education system (D) (v2xed_ed_cent)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: Is control over educational structures and resources centralized?

Clarification: This index measures the extent to which the regime has control over education structures and resources based on the centralization of the curriculum and textbooks.

Scale: Interval, from low to high (0-1).

Source(s): v2edcentcurrlm v2edcenttxbooks

Data release: 1.

Aggregation: We estimate the index by averaging two indicators: v2edcentcurrlm and v2edcenttxbooks.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.5 Control over educational agents (D) (v2xed_ed_ctag)

Additional versions: * codelow, * codehigh, * sd, * mr

Question: How strong is state-control over agents in education?

Clarification: This index measures the extent to which the regime is able to control teachers and teaching practices inside the classroom based on the strength of teacher autonomy and unions, and the hiring/firing of teachers.

Scale: Interval, from low to high (0-1).

Source(s): v2edteautonomy v2edteunionindp v2edtehire v2edtefire

Data release: 1.

Aggregation: We estimate the index by taking the point estimates from a Bayesian factor analysis model of the indicators: v2edteautonomy, v2edteunionindp, v2edtehire, and v2edtefire.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.6 Indoctrination content in education (D) (v2xed_ed_con)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: To what extent is the indoctrination content in education democratic (and not patriotic)?

Clarification: This index combines indicators from the democratic and patriotic indoctrination content indices in education (i.e., v2xed_ed_dmcon and v2xed_ed_ptcon). This index should be used if patriotic principles are considered to be at odds with democratic principles, i.e., higher values of the patriotic content indicators will be associated with lower values of this index. If democratic and patriotic indoctrination content are considered to be orthogonal, v2xed_ed_dmcon and v2xed_ed_ptcon should be used instead.

Scale: Interval, from low to high (0-1).

Source(s): v2edpoledrights v2edideolch_rec v2edcritical v2edplural v2edpatriot v2edscpatriotcb

Notes: The scales of v2edpatriot and v2edscpatriotcb have been reversed to accommodate the direction of the index.

Data release: 1.

Aggregation: We estimate the index by taking the point estimates from a Bayesian factor analysis model of the variables: v2edpoledrights v2edideolch_rec v2edcritical v2edplural v2edpatriot v2edscpatriotcb.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.7 Democratic indoctrination content in education (D) (v2xed_ed_dmcon)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: To what extent is the indoctrination content in education democratic?

Clarification: Indoctrination content in education can range from being democratic (participatory, critical, pluralist) to autocratic (loyal/obedient, uncritical, single view/ideology). This index measures the democratic/autocratic character of the regime's doctrine based on the core teaching principles and the level of contestation promoted in education.

Scale: Interval, from low to high (0-1).

Source(s): v2edpoledrights v2edideolch rec v2edcritical v2edplural

Data release: 1.

Aggregation: We estimate this index by taking the point estimates from a Bayesian factor analysis model of the indicators: v2edpoledrights, v2edideolch rec, v2edcritical, and v2edplural.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.8 Patriotic indoctrination content in education (D) (v2xed_ed_ptcon)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: To what extent is the indoctrination content in education patriotic?

Clarification: Patriotism is another key tool that regimes can use to build political support for the broader political community. This index measures the extent of patriotic content in education by focusing on patriotic content in the curriculum as well as the celebration of patriotic symbols in schools more generally.

Scale: Interval, from low to high (0-1).

Source(s): v2edpatriot v2edscpatriotcb

Data release: 1.

Aggregation: We estimate the index by averaging two indicators: v2edpatriot and v2edscpatriotcb.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.9 Patriotic indoctrination content in education and the media (D) (v2xed ptcon)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: To what extent is the indoctrination content in education and the media patriotic?

Clarification: This is an aggregate index of patriotic indoctrination across education and the media that combines the patriotism indicators in education (v2edpatriot and v2edscpatriotcb) and the media (v2medpatriot).

Scale: Interval, from low to high (0-1).

Source(s): v2edpatriot v2edscpatriotcb v2medpatriot

Data release: 1.

Aggregation: We estimate this index by taking the point estimates from a Bayesian factor analysis model of the indicators: v2edpatriot, v2edscpatriotcb, and v2medpatriot.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.10 Indoctrination potential in education and the media (D) (v2xedvd_inpt)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: How strong is the potential for indoctrination in education and the media?

Clarification: This is an aggregate index of indoctrination potential across education and the media that combines the indices that make up the indoctrination potential in education index (v2xed_ed_inpt) and indoctrination potential in media index (i.e., v2xedvd_me_inco).

Scale: Interval, from low to high (0-1).

Source(s): v2xed_ed_poed v2xed_ed_inco v2xedvd_me_inco

Notes: The component v2xedvd_me_inco includes supplementary V-Dem indicators. See the variable description of v2xedvd_me_inco for more information.

Data release: 1.

Aggregation: We estimate the index by taking the point estimates from a Bayesian factor analysis model of the indices: v2xed_ed_poed, v2xed_ed_inco, and v2xedvd_me_inco.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.11 Indoctrination coherence (potential) in the media (D) (v2xedvd_me_inco)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: How coherent are the means of indoctrination in the media?

Clarification: This index measures the extent to which a coherent single doctrine of political values and model citizenship can be delivered through the media. The index is a function of the centralization of the media in the hands of the regime and the regime's control over media agents. Greater centralization and control are expected to lead to a more coherent doctrine being delivered through the media.

Scale: Interval, from low to high (0-1).

Source(s): v2xedvd_me_cent v2xedvd_me_ctag

Notes: Indoctrination potential in the media can be measured using v2xed_me_inco. See the V-Indoc Introduction working paper for more information. The components v2xedvd_me_cent and v2xedvd_me_ctag include supplementary V-Dem indicators. See the variable descriptions of these indices for more information.

Data release: 1.

Aggregation: We estimate the index by averaging two indices: v2xedvd_me_cent and v2xedvd_me_ctag.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.12 Centralization of media control (D) (v2xedvd_me_cent)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: Is control over the media centralized?

Clarification: This index measures the extent to which the media is centralized under and can be regulated by the regime.

Scale: Interval, from low to high (0-1).

Source(s): v2medpolstate v2medpolnonstate v2mecenefm v2merange

Notes: This index combines variables from V-Dem and V-Indoc. The following variables are sourced from V-Dem: v2mecenefm and v2merange. The scales of these variables have been reversed to accommodate the direction of the index.

Data release: 1.

Aggregation: We estimate the index by taking the point estimates from a Bayesian factor analysis model of the indicators: v2medpolstate, v2medpolnonstate, v2mecenefm, and v2merange.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

2.13 Control over media agents (D) (v2xedvd_me_ctag)

Additional versions: *_codelow, *_codehigh, *_sd, *_mr

Question: How strong is state-control over agents in the media?

Clarification: This index measures the extent to which the regime is able to control various media agents.

Scale: Interval, from low to high (0-1).

Source(s): v2medstateprint v2medstatebroad v2medentrain v2meharjrn v2meslfcen

Notes: This index combines variables from V-Dem and V-Indoc. The following variables are sourced from V-Dem: v2meharjrn and v2meslfcen. The scales of these variables have been reversed to accommodate the direction of the index.

Data release: 1.

Aggregation: We estimate the index by taking the point estimates from a Bayesian factor analysis model of the indicators: v2medstateprint, v2medstatebroad, v2medentrain, v2meharjrn, and v2meslfcen.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3 V-Indoc Indicators

3.1 General Curriculum

Definition: The official curriculum (set by national / sub-national / local authorities / school administrations) may include: textbooks, topics covered in subject syllabi, teaching materials, as well as the list of subjects that are to be taught by schools and the amount of time that should be devoted to each subject.

3.1.1 Centralized curriculum (C) (v2edcentcurrlm)

```
Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
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Question: To what extent does a national authority set the official curriculum framework for schools?

Clarification: The official curriculum may only be a framework, to which individual schools can contribute. For this question, we are interested in all school subjects across levels of primary and secondary public education. If there are substantive differences between the primary and secondary education levels, please provide the response that is most accurate for the majority of schools. A national (or federal) authority can include a state body organized under the auspices of a Ministry of Education. The sub-national level includes states, provinces, districts, municipalities, villages, local educational authorities, etc.

Responses:

- 0: A national authority <u>does not set</u> the official curriculum framework, that is, the curriculum framework is completely set by sub-national authorities.
- 1: Sub-national authorities mostly set the official curriculum framework, with <u>some input</u> from the national authority.
- 2: A national authority $\underline{\text{mostly sets}}$ the official curriculum framework, with some input from sub-national authorities.
- 3: A national authority fully sets the official curriculum framework.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.1.2 Centralized textbook approval (C) (v2edcenttxbooks)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr Question: What proportion of school textbooks across core subjects does a national authority approve centrally?

Clarification: For this question, we are interested in core subjects, such as languages, mathematics, science, arts, social studies, history, geography. We are not interested in textbooks teaching foreign languages that could be subcontracted to a foreign publisher. Please consider school subjects across levels of formal primary and secondary public education. If there are substantive differences between the primary and secondary education levels, please provide the response that is most accurate for the majority of schools. Examples of ways in which textbook production is centrally approved or authorized include: a national public authority reviews textbook content and approves textbooks for use in schools; there is a state-mandated national list of textbooks that schools are recommended to use; the Ministry of Education directly publishes textbooks. A national (or federal) authority can include a public authority organized under the auspices of a Ministry of Education or a different authority.

Responses:

- 0: $\underline{\text{No}}$ textbooks are centrally approved by a national authority.
- 1: Some textbooks are centrally approved by a national authority.

2: <u>All</u> textbooks are centrally approved by a national authority.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2 Specialized Subject Curriculum

3.2.1 Political education, primary school (C) (v2edpoledprim)

```
Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
```

Question: Are <u>primary school</u> students required to study at least one subject that predominately focuses on teaching political values?

Clarification: Examples of subjects that focus on teaching political values include specific subjects in political education, as well subjects where political values are integrated in the curriculum: for example, moral, religious and civic education; ethics and civics; 'knowledge about society' with elements of sociology, politics, legal studies, or economics. This does not include history as a subject. We are not interested in de jure subject labels but in de facto subject content: a course does not need to be entitled "political values" to be considered here. Political values refer to goals that are the desirable purposes for socio-political organizations such as the political community, the nation-state, and regime. Political values guide an individual's or group's general behavior/attitudes toward political 'objects' (e.g. leaders, events, ideologies).

Responses:

0: No. There is no general requirement for the majority of primary school students to study at least one subject predominately focused on political values.

1: Yes. The majority of primary school students are required to study at least one subject that is predominately focused on political values.

Scale: Binary, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.2 Political education, secondary school (C) (v2edpoledsec)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Are secondary school students required to study at least one subject that predominately focuses on teaching political values?

Clarification: Examples of subjects that focus on teaching political values include specific subjects in political education, as well subjects where political values are integrated in the curriculum: for example, moral, religious, and civic education; ethics and civics; 'knowledge about society' with elements of sociology, politics, legal studies, or economics. This does not include history as a subject. We are not interested in de jure subject labels but in de facto subject content: a course does not need to be entitled "political values" to be considered here. In cases, where upper secondary education is specialized, please only consider lower secondary education. Political values refer to goals that are the desirable purposes for socio-political organizations such as the political community, the nation-state, and regime. Political values guide an individual's or group's general behavior/attitudes toward political 'objects' (e.g. leaders, events, ideologies).

Responses:

0: No. There is no general requirement for the majority of secondary school students to study at least one subject predominately focused on political values.

1: Yes. The majority of secondary school students are required to study at least one subject that is predominately focused on political values.

Scale: Binary, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.3 Political rights and duties in the curriculum (C) (v2edpoledrights)

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Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
```

Question: To what extent does the curriculum of subjects that include the teaching of political values cover topics related to individuals' political rights and duties?

Clarification: In this question we are asking about the subjects you considered in the previous two questions, on average across primary and secondary education. Again, these subjects may be specifically focused on political education or may be subjects into which the teaching of political values is only integrated. Political rights and duties include: guarantees of equal political opportunities and equal protection under the law, regardless of race, religion, gender, or other personal attributes; the right or duty to vote; the right to organize and protest; or the right to join labor unions.

Responses:

- 0: These subjects $\underline{\text{do not cover}}$ these topics.
- 1: These subjects rarely cover these topics.
- 2: These subjects cover these topics, but not at depth.
- 3: These subjects cover these topics in some depth.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.4 Patriotic education in the curriculum (C) (v2edpatriot)

```
Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
```

Question: How often does the language curriculum promote patriotism?

Clarification: We are interested in the curriculum for core subjects in language studies, common to a majority of students, for example, teaching the official language(s) of the country. We are not interested in foreign languages. By promoting patriotism, we mean encouraging feelings of love, pride, loyalty and commitment to one's country. For example, promoting patriotism can take the form of teaching narratives that celebrate the country's military past, national origin stories, the majority ethnic or religious group, or accomplishments in economic or technological sectors. Patriotic education could be part of the texts used to teach basic literacy skills (e.g. handwriting exercises), language textbooks, assigned readings in the literature curriculum, as well as in accompanying teaching manuals. Please consider a typical situation for students in primary and secondary schools. If the situation varies across educational levels, please provide the response that is most accurate for the majority of students.

Responses:

- 0: Rarely or never.
- 1: Sometimes.
- 2: Often.
- 3: Extensively.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.5 Ideology in the curriculum (C) (v2edideol)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: How often does the history curriculum promote a specific societal model or ideology?

Clarification: A societal model or ideology is generally a codified set of beliefs used to justify a particular social and political order, for example, socialism, democracy, liberalism, fascism or social orders related to a specific religion. The history curriculum can promote a specific ideology or societal model by often referring to it and clearly interpreting one model as better than other alternatives. We are not just interested in de jure history subjects, but also in the de facto subject content. Please consider a typical situation for students in primary and secondary schools. If the situation varies across educational levels, please provide the response that is most accurate for the majority of students.

Responses:

- 0: Rarely or never.
- 1: Sometimes.
- 2: Often.
- 3: Extensively.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.6 Ideology character in the curriculum (C) (v2edideolch)

Additional versions: *_nr

Question: How would you characterize the dominant societal model(s) or ideology(ies) promoted through the history curriculum, identified in the question for v2edideol?

Clarification: Select up to two options that apply if the history curriculum promotes more than one dominant social model or ideology, focusing on the most important. Please refer to the curriculum taught in a typical school.

Responses:

- 1: Nationalist [No=0, Yes=1, v2edideolch 1].
- 2: Socialist or communist [No=0, Yes=1, v2edideolch_2].
- 3: Restorative or conservative [No=0, Yes=1, v2edideolch_3].
- 4: Democratic norms, e.g. liberalism or pluralism [No=0, Yes=1, v2edideolch_4].
- 5: Democratic institutions, e.g. elections [No=0, Yes=1, v2edideolch_5].
- 6: Personality cult [No=0, Yes=1, v2edideolch 6].
- 7: Religious [No=0, Yes=1, v2edideolch_7].
- 8: Ethnicity, clan or tribe [No=0, Yes=1, v2edideolch_8].
- 9: Other societal model or ideology [No=0, Yes=1, v2edideolch_9].
- 10: The history curriculum does not promote a specific societal model or ideology [No=0, Yes=1, v2edideolch_10].

Scale: Series of dichotomous scales.

Answer-type: Multiple selection.

Data release: 1.

Cross-coder aggregation: Mean.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.7 Ideology character in the curriculum (C) (v2edideolch_rec)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: How would you characterize the dominant societal model(s) or ideology(ies) promoted through the history curriculum, identified in the question for v2edideol?

Responses:

0: Autocratic.

1: Democratic.

Scale: Ordinal, converted to interval by the measurement model.

Answer-type: Multiple selection.

Notes: This variable is a recoded version of v2edideolch so that if either of the democratic alternatives (4 or 5) are selected this variable is set to 1. Otherwise it equals 0. If a 4 or 5 is selected together with a 10, we set it to 0.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.8 Pluralism in the curriculum (C) (v2edplural)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: When historical events are taught, to what extent are students exposed to diverse views and/or interpretations of these events?

Clarification:

We are not interested in de jure history subjects but in the de facto subject content, that is, in history-related subjects or in subjects that are predominantly focused on teaching history. We are interested in how much space is given to alternative viewpoints, such as alternative political ideologies, in the teaching of history. For example, if the major international conflict is taught, it can be studied exclusively from the perspective of the country's now-dominant power.

Responses:

- 0: Rarely or never.
- 1: Sometimes.
- 2: Often.
- 3: Extensively.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.9 Critical engagement with education content (C) (v2edcritical)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: To what extent do students have opportunities to discuss what they are taught in $\underline{\text{history}}$ classes?

Clarification: This question regards the degree to which students are de facto given the opportunity to engage in debates which question the material and content of their history classes, as well as being able to voice disagreement with each other. Critical engagement with the content can be

expressed by engaging in discussions with the teacher or other students, in oral presentations, or in written work (for example, exams and essays). *Opportunity* means that critically engaging with the content would not bring down students' marks.

Responses:

- 0: Students are never or rarely given the opportunity to discuss what they are taught.
- 1: Students are sometimes given the opportunity to discuss what they are taught.
- 2: Students are often given the opportunity to discuss what they are taught.
- 3: Students are extensively given the opportunity to discuss what they are taught.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.10 Teacher autonomy in the classroom (C) (v2edteautonomy)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Do <u>history</u> teachers have autonomy to deviate from the content of the official curriculum in the classroom?

Clarification: Here we aim to capture the degree to which teachers have autonomy to de facto deviate from the intended or official curriculum in their classes. Examples of how teachers can deviate from the content of the official curriculum: selecting textbooks that are different from those authorized or recommended by a central authority; diverging from the official curriculum in terms of the amount of time allocated to different topics, or supplement/expand on the official curriculum. In cases where there is no official history curriculum, or the official history curriculum sets only loose restrictions on teachers' autonomy, please code this question as zero (generally autonomous).

Responses:

- 0: They are free to deviate to a large extent: teachers are generally autonomous.
- 1: They are free to deviate to a moderate extent: teachers' autonomy is somewhat restricted.
- 2: They are free to deviate to a small extent: teachers' autonomy is mostly restricted.
- 3: They are not at all free to deviate: teachers' autonomy is completely restricted.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.2.11 Mathematics and science education (C) (v2edmath)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_mode, *_nr

Question: What proportion of instructional weekly hours is dedicated to mathematics and natural sciences in primary education?

Clarification: For this question, please approximate the proportion of instructional hours across grades of primary education. *Mathematics* includes arithmetic, geometry, algebra, calculus. *Natural sciences* include chemistry, biology, physics, as well as classes in computing and engineering.

Responses:

- 0: A small proportion (less than 25%).
- 1: A large proportion (about 25% or more).

Scale: Binary, converted to interval by the measurement model.

Notes: For the mode version of this variable, we assign an observation a value of 0.5 if the mode is

not unique, i.e., a value of 0.5 represents a multimodal response distribution.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.3 Teachers

3.3.1 Education requirements for primary school teachers (C) (v2edtequal)

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Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
```

Question: What are the de facto education requirements to become a primary school teacher?

Clarification: If there is substantive variation at the sub-national or local levels, please consider the education requirements for the majority of primary school teachers in the country. Some countries may require a degree/diploma in education and others may accept a degree in any subject – indicate the completed education level required regardless of specialization. Please consider initial requirements to be a teacher not those for further professional development.

Responses:

- 0: There are no educational requirements for aspiring teachers beyond proof of basic literacy and/or numeracy skills (ISCED Level 2 or lower).
- 1: Aspiring teachers must have completed a secondary school level education (ISCED Level 3).
- 2: Aspiring teachers must have achieved an education at the post-secondary, non-university level (for example, technical or vocational institutions) (ISCED Level 4).
- 3: Aspiring teachers must have completed at least one degree program taught at the university level (ISCED Level 5 and above).

Scale: Ordinal, converted to interval by the measurement model.

Notes: In defining different education levels, we use the ISCED classification adopted by UNESCO, the International Standard Classification of Education (ISCED) 2011.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.3.2 Teacher inspection (C) (v2temonitor)

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Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
```

Question: Is there a comprehensive monitoring system in place for public authorities to conduct external teacher inspection?

Clarification: This question concerns the formal monitoring efforts of the relevant public/government authorities (national / sub-national / local authorities / school district administration) to conduct external inspection of teachers, that is, it concerns the operations of a formal bureaucratic hierarchy outside of school that works to inspect teachers. We are not interested in peer review observations of teachers working in the same school. We are not interested in de jure formal procedures but whether they are de facto carried out in practice. Teacher inspection can include external inspectors conducting teaching observations inside the classroom or during a class, before a class (audits of teachers' lesson plans) or after a class (for example, audits of students' notebooks and teachers' assessment of students' schoolwork). We define a comprehensive inspection in the following way(s): inspections are regular, conducted according to standardized and transparent protocols, with impartial and objective judgements; inspection results are reported to relevant national or sub-national government offices, etc. If there are substantive differences between the primary and secondary education levels, please provide the response that is most accurate for the majority of schools.

Responses:

- 0: There is <u>no</u> external teacher inspection.
- 1: While there is a system in place for external teacher inspection, it is not comprehensive.
- 2: There is a generally comprehensive system in place for external teacher inspection.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.3.3 Presence of teacher unions (C) (v2edteunion)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_mode, *_nr Question: Do officially recognized teacher unions exist in this country?

Clarification: Please answer this question without taking into account the nature of the union. That is, for the purposes of this question it is irrelevant if the teacher union is distinct or part of a larger union (e.g. a trade union federation). This question does not concern why a teacher's union does or does not exist. It is irrelevant if a union does not exist because (teacher) unionization is formally prohibited, teacher unionization can be allowed de jure but prohibited de facto due to government pressure, or there can be a lack of organization capacity among teachers.

Responses:

- 0: No officially recognized teacher unions exist.
- 1: Officially recognized teacher unions exist.

Ordering: If answer is 0 in a given year, please skip v2edteunionindp for this year

Scale: Binary, converted to interval by the measurement model.

Notes: This is a filtering question for v2edteunionindp. For the mode version of this variable, we assign an observation a value of 0.5 if the mode is not unique, i.e., a value of 0.5 represents a multimodal response distribution.

Data release: 1.

 $Cross-coder\ aggregation$: Bayesian item response theory measurement model (see $V-Dem\ Methodology$).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.3.4 Independent teacher unions (C) (v2edteunionindp)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Are officially recognized teacher unions independent from political authorities?

Clarification: Please answer this question regardless of the nature of teacher unions, that is, it is irrelevant if teacher unions are distinct or part of a comprehensive union (e.g. trade union federations). In cases where there is substantive sub-national variation, please consider teacher unions in the most populous sub-national units. Political authorities can be national / sub-national / local public authorities and include ruling political parties and office holders such as presidents, prime minister or ministers. This question does not distinguish between different mechanisms that can lead to teacher unions being dependent on the state. It is irrelevant if the relationship with the state was due to coercion, co-optation, or voluntary strategic alliances.

Responses:

- 0: Teacher unions are fully independent.
- 1: Teacher unions are mostly independent.
- 2: Teacher unions are somewhat independent.
- 3: Teacher unions are not independent.

Scale: Ordinal, converted to interval by the measurement model.

Notes: Please answer this question only when option 1 was selected for v2edteunion.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Cleaning: Set to missing when v2edteunion is 0.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.3.5 Political teacher hiring (C) (v2edtehire)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: To what extent are hiring decisions for teachers based on their political views and/or political behavior and/or moral character?

Clarification: Please consider hiring decisions across <u>all</u> subjects. This question concerns actual practice (de facto, not legislation pertaining to the recruitment procedures for teachers). This question concerns hiring decisions based on political views, or statements, participation in political protests, or membership in political parties or other organizations on the part of hiring candidates. Note that these behaviors can result in either a) relevant candidates not being hired (for example, being denied a teaching job due to a party affiliation) and b) only specific candidates being hired (for example, being hired due to pro-regime ideological affinities, party membership or moral character). Note that sometimes "moral character" is used as a pretext for political hiring decisions. In such cases, treat this pretext as political. Please consider the situation for both primary and secondary school teachers. If there are substantive differences between the primary and secondary education levels, please provide the response that applies to the majority of teachers.

Responses:

- 0: Rarely or never.
- 1: Sometimes.
- 2: Often.
- 3: Almost exclusively.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.3.6 Political teacher firing (C) (v2edtefire)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: How likely is it that teachers <u>would be fired</u> if they were to publicly express political views that contradict the dominant political order?

Clarification: This question pertains to firings of teachers on the basis of their political views, statements or membership in parties or organizations. We are not interested in firings for reasons related to their performance or professional competencies. Dominant political order: A country's political norms and key political institutions and authorities. We are not interested in the violations of predominant social, cultural and moral norms unless they are explicitly politicized. Public expression of political views can happen at school or outside of school (for example, public tweets, participation in a protest).

Responses:

- 0: Teachers would <u>almost never</u> be fired.
- 1: Teachers would <u>sometimes</u> be fired.
- 2: Teachers would likely be fired.
- 3: Teachers would almost certainly be fired.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.4 Schools

3.4.1 Presence of patriotic symbols in schools (C) (v2edscpatriot)

Additional versions: *_osp, *_ord__, *_codelow, *_codehigh, *_sd, *_mean, *_mode, *_nr Question: Are patriotic symbols displayed in schools?

Clarification: Examples of patriotic symbols include: the national flag, a picture or bust of current or past country leaders, singing the national anthem or reciting national pledges, and celebrations of national days, heroes, historical or military events (for example, victory in a war). It further includes symbols associated with the ruling party, royal family, military junta, or other group/entity representing the political regime (e.g., party logo, symbol for royal family, military symbol tied to the particular regime, symbol of specific ethnic group or class dominating the regime). Patriotic symbols include religious symbols if (and only if) religious and state authorities are closely interlinked. Here we refer to the school building(s) and classrooms and not to the content of learning material, such as textbooks. If there is significant variation in the use of patriotic symbols across the territory, the answer should reflect the average or typical school across the sub-national units.

Responses:

- 0: Patriotic symbols are usually not displayed.
- 1: Patriotic symbols are displayed.

Ordering: If answer is 0 in a given year, please skip v2edscpatriotcb for this year

Scale: Binary, converted to interval by the measurement model.

Notes: This is a filtering question for v2edscpatriotcb. For the mode version of this variable, we assign an observation a value of 0.5 if the mode is not unique, i.e., a value of 0.5 represents a multimodal response distribution.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.4.2 Celebration of patriotic symbols (C) (v2edscpatriotcb)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: How often are patriotic symbols or dates celebrated in schools?

Clarification: To <u>celebrate</u> patriotic symbols can be: to explicitly draw students' attention to the symbols or to regularly remind students about the symbols. Examples include: flag raising ceremonies, reciting a pledge of allegiance, or broadcasting or singing the national anthem.

Responses:

- 0: Never.
- 1: Once per year or less.
- 2: Several times per year.
- 3: At least once per week.

Scale: Ordinal, converted to interval by the measurement model.

Notes: Please answer this question only when 1 is selected in a given year for v2edscpatriot

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see $V\text{-}Dem\ Methodology$).

Cleaning: Set to 0 when v2edscpatriot is 0.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.4.3 Extracurricular activities (C) (v2edscextracurr)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Do schools promote involvement in extracurricular civic and/or political activities?

Clarification: Extracurricular civic activities can include (but are not limited to): joining a political organization, a specific political party, the army, a civil society organization, a labor union, a grassroots activist organization, volunteering in the local community, leadership activities, school-community partnerships. Schools can promote these activities by providing such opportunities (e.g. by having a school council), or encouraging pupils to get involved in these outside of school (e.g. by emphasizing the importance of volunteering).

Responses:

- 0: Schools do not promote extracurricular civic and/or political activities.
- 1: Schools promote extracurricular civic and/or political activities to some extent, but these activities are not considered an integral part of education.
- 2: Schools promote extracurricular civic and/or political activities as an integral part of education.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.5 Media

Definitions: Two types of <u>media</u> are distinguished: (1) print and (2) broadcast. By <u>print</u> media, we refer to newspapers, magazines, or printed journals whose content can be consumed through their printed or online editions. <u>Broadcast</u> media includes radio and television stations whose content can be consumed offline or online, for example, through station's websites.

3.5.1 State-owned print media (C) (v2medstateprint)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Out of the top four national <u>print</u> media with the highest readership, how many are state-owned?

Clarification: If there are fewer than four national print media, please provide your answer based on the number of existing national print media. By print media, we refer to newspapers, magazines, or printed journals whose content can be consumed through their printed or online editions. In this question, we are only interested in state ownership of the media – not in the extent to which the state may control editorial decisions. State ownership takes different forms. For example, state-owned media can be funded by government license fees and advertising. They can also be directly controlled by government agencies (e.g. the Ministry of Information and Culture). The state, the ruling party, or the Head of Government / the Head of State, can also be the owner of media in this context.

Responses:

- 0: There are <u>no</u> state-owned print media outlets.
- 1: State-owned outlets make up a minority of print media outlets.
- 2: There is an equal share of state- and non-state owned print media outlets.
- 3: State-owned outlets make up the majority of print media outlets.
- 4: All print media outlets are state-owned.

Ordering: If v2medstateprint and v2medstatebroad are both set to 0 do not answer v2medpolstate. If both are set to 4 do not answer v2medpolnonstate.

Scale: Ordinal, converted to interval by the measurement model.

Notes: This is a filtering question for v2medpolstate and v2medpolnonstate.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.5.2 State-owned broadcast media (C) (v2medstatebroad)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Out of the top four national <u>broadcast</u> media with the largest audience, how many are state-owned?

Clarification: If there are fewer than four national broadcast media, please provide your answer based on the number of existing national broadcast media. Broadcast media includes radio and television stations whose content can be consumed offline or online, for example, through station's websites. Here, we are only interested in state ownership of the media – not in the extent to which the state may control editorial decisions. State ownership takes different forms. For example, state-owned media can be funded by government license fees and advertising. They can also be directly controlled by government agencies (e.g. the Ministry of Information and Culture). The state, the ruling party, or the Head of Government / the Head of State, can also be the owner of media in this context.

Responses:

- 0: There are no state-owned broadcast media outlets.
- 1: State-owned outlets make up a minority of media broadcast outlets.
- 2: There is an equal share of state- and non-state owned broadcast media outlets.
- 3: State-owned outlets make up the majority of broadcast media outlets.
- 4: <u>All</u> broadcast media outlets are state-owned.

Ordering: If v2medstate print and v2medstatebroad are both set to 0 do not answer v2med polstate. If both are set to 4 do not answer v2med polnonstate.

Scale: Ordinal, converted to interval by the measurement model.

Notes: This is a filtering question for v2medpolstate and v2medpolnonstate.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.5.3 Political influence, state-owned media (C) (v2medpolstate)

```
Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr
```

Question: For the print and broadcast media outlets owned by the state, how often do political authorities influence how these outlets cover political issues?

Clarification: Political authorities can be national / sub-national / local public authorities and include ruling political parties and office holders, such as presidents, prime minister or ministers. Political authorities can influence which political issues state-media cover, how, and how much they cover them. For example, they can exert influence by directly or indirectly controlling the hiring and firing of producers, directors, writers, editors, and announcers; by manipulating the resources these media require; by withholding resources required for printing or broadcast. Political authorities can also directly dictate content and make editorial decisions.

Responses:

0: Political authorities (almost) never influence the coverage of political issues.

- 1: Political authorities <u>sometimes</u> influence the coverage of political issues.
- 2: Political authorities often influence the coverage of political issues.
- 3: Political authorities almost always influence the coverage of political issues.

Scale: Ordinal, converted to interval by the measurement model.

Notes: Please answer this question only when both v2med stateprint and v2med statebroad are not both 0.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Cleaning: Set to missing when v2medstateprint and v2medstatebroad are both 0.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.5.4 Political influence, non state-owned media (C) (v2medpolnonstate)

 $Additional\ versions:\ *_osp,\ *_ord_,\ *_codelow,\ *_codehigh,\ *_sd,\ *_mean,\ *_nrange and an experimental properties of the properti$

Question: For the print and broadcast media outlets NOT owned by the state, how often do political authorities influence how these cover political issues?

Clarification: Political authorities can be national / sub-national / local public authorities and include ruling political parties and office holders, such as presidents, prime minister or ministers. Political authorities can influence the coverage of non-state owned outlets both directly and indirectly. Indirect forms of control might include politically motivated awarding of broadcast frequencies, withdrawal of financial support, influence over printing facilities (e.g. subsidized newsprint) and distribution networks, selected distribution of advertising, onerous registration requirements, and prohibitive tariffs. They might also include tax privileges, bribery, and cash payments. Indirect forms of control may also include the intimidation of owners, advertisers, and editors, through the use of threats and violence.

Responses:

- 0: Political authorities (almost) never influence the coverage of key political issues.
- 1: Political authorities <u>sometimes</u> influence the coverage of key political issues.
- 2: Political authorities often influence the coverage of key political issues.
- 3: Political authorities almost always influence the coverage of key political issues.

Scale: Ordinal, converted to interval by the measurement model.

Notes: Please answer this question only when both v2medstateprint and v2medstatebroad are not both 4.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Cleaning: Set to missing when v2medstateprint and v2medstatebroad are both 4.

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.5.5 Patriotism in the media (C) (v2medpatriot)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: How often do media outlets promote patriotism?

Clarification: Promotion of patriotism can be associated with promotion of patriotic consciousness, the love of the country, national pride, loyalty and commitment. For example, specific narratives can celebrate the country's military past, national origin stories, or accomplishments in economic or technological sectors. Patriotism can be promoted in news, movies, TV shows, radio shows, music, or magazines. For this question, please consider all (state-owned as well as not state-owned) broadcast and print media outlets.

Responses:

0: Rarely or never.

- 1: Sometimes.
- 2: Often.
- 3: Extensively.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1.

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

3.5.6 Control of entertainment content (C) (v2medentrain)

Additional versions: *_osp, *_ord_, *_codelow, *_codehigh, *_sd, *_mean, *_nr

Question: Do political authorities have control over the production of entertainment content?

Clarification: Entertainment includes both broadcast and print content, such as movies, TV shows, radio shows, music, and magazines. Here we distinguish between entertainment content and news content (although, in some cases news content can have an entertainment component, and vice versa), focusing on entertainment. Political authorities can be national / sub-national / local public authorities and include ruling political parties and office holders, such as presidents, prime minister or ministers. It is irrelevant how political authorities came to exert the control over the entertainment content.

Responses:

- 0: Political authorities exert <u>almost no control</u> over the production of entertainment content.
- 1: Political authorities exert some control over the production of entertainment content.
- 2: Political authorities exert a <u>high level of control</u> over the production of entertainment content.
- 3: Political authorities almost exclusively control the production of entertainment content.

Scale: Ordinal, converted to interval by the measurement model.

Data release: 1

Cross-coder aggregation: Bayesian item response theory measurement model (see V-Dem Methodology).

Years: 1945-2021.

Citation: Neundorf et al. (2023).

4 Other Education and Media Variables

4.1 Curriculum and Textbooks

4.1.1 Mathematics, primary (bn_math_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.

Years: 1980s, 2000s.

Citation: Benavot (2004).

4.1.2 Science, Computer and Technology, primary (bn_sci_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.3 Math and Science, primary (bn_mathsci_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.4 Social Sciences, primary (bn_socsci_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.5 Arts, primary (bn_arts_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.6 Language education, primary (bn_lang_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.7 Moral education, primary (bn_moraleduc_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.8 Religion, primary (bn_relig_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.9 Skills and competencies, primary (bn_skills_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.10 Sports, primary (bn_sports_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.11 Optional and others, primary (bn_other_p)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.12 Mathematics, secondary (bn_math_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.13 Science, Computer and Technology, secondary (bn_sci_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.14 Math and Science, secondary (bn_mathsci_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.15 Social Sciences, secondary (bn_socsci_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 113. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.16 Arts, secondary (bn_arts_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.17 Language education, secondary (bn_lang_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 114.

Years: 1980s, 2000s.

Citation: Benavot (2004).

4.1.18 Moral education, secondary (bn_moraleduc_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.19 Religion, secondary (bn_relig_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 117.
Years: 1980s, 2000s.
Citation: Benavot (2004).

4.1.20 Skills and competencies, secondary (bn_skills_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 116. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.21 Sports, secondary (bn_sports_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.22 Optional and others, secondary (bn_other_s)

Clarification: % of median yearly instructional hours.

Notes: The original dataset provides two data points that summarize instructional hours over the 1980s and 2000s, respectively. In this dataset, these two data points are treated as being constant over the 1980s and 2000s.

Countries: 115. Years: 1980s, 2000s. Citation: Benavot (2004).

4.1.23 Number of textbooks: total (br_subjtot)

Clarification: Total number of textbooks recorded in the data source for a given country-year observation.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.24 International involvement (br_intlbook)

Question: Is there any indication of non-national involvement in the writing of the textbook (e.g. international consultant author, non-national university, international publisher, international organization)?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.25 Official approval (br_approval)

Question: Is there evidence that the textbook has been developed to meet official curriculum requirements (e.g., a stamp of approval from the Ministry of Education, or a note in the preface about how this textbook fits in the national curriculum)?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.26 Open-ended questions (br_openg)

Question: Are there open-ended questions (meaning questions without right-wrong answers that require students to form their own opinion)? For example: "should the constitution be considered a living document? Discuss why or why not."

Responses:

- 0: No questions.
- 1: There are questions, but none are open-ended.
- 2: Some/a few questions are open-ended.
- 3: A lot/nearly all questions are open-ended.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.27 Activities, projects, or assignments (br_projects)

Question: Does the book include activities, projects or assignments?

Responses:

- 0: None/rarely.
- 1: Some.
- 2: In most/all chapters.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.28 Learner friendly images (br_scpic)

Question: If there are images in the book, how many of the pictures or figures in the textbook are learner friendly? For example, pictures of youth or cartoon figures, pictures of activities such as soccer, and pictures of ordinary people (NOT pictures of military or political leaders).

Responses:

- 0: There are no pictures in the book.
- 1: There are pictures, but they are not learner friendly.
- 2: Some/a few/less than half are learner friendly.
- 3: Over half/most are learner friendly.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.29 Social or personal issues (br_persoc)

Question: Does the text address social or personal issues (e.g., dating, career, diet, exercise/lifestyle choices, money, friendship, and alcohol/drugs)?

Responses:

- 0: No.
- 1: Some.
- 2: A lot.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.30 Develop own point of view (br_opin)

Question: Does the textbook generally assume that the student should develop his/her own point of view, or interpretation, of history or social issues?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.31 Student involvement (br_polpart)

Question: Does the textbook suggest ways for students get involved (e.g. join a political party, volunteering to help the poor)? (Note: The discussion can be for 'people' more generally, if it seems to include students.)

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.32 Primary sources: official (br primoff)

Question: Does the textbook include official government documents as primary sources in the text or in the appendix (e.g., national constitution, proclamations, letters from presidents or other political leaders)?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.33 Primary sources: everyday life (br_primsoc)

Question: Does the textbook include primary sources from everyday life (e.g., accounts of regular people, newspaper stories, personal diaries)?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 82. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.34 Approach to historical events or social issues (br_hynar)

Question: Which statement best describes the approach to historical events or social issues in this textbook:

Responses:

- 0: Neither approach describes this book.
- 1: This textbook provides a factual record of what happened or is happening. This textbook will tell students about the important people and events that shaped this period of history or social issues.
- 2: History and social issues include many different kinds people with different views of events. This textbook will tell the story of the past or of social events through the eyes of different people involved.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.35 National society and culture (br_natl)

Question: Does the book celebrate a distinctive national state or national society and culture?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.36 National military (br_natlmen_mil)

Question: Following aspects of national life are discussed in a paragraph or more: National Military (service, strength of military, important 'national' battles, military heroes/leaders).

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.37 National independence (br_natlmen_ind)

Question: Following aspects of national life are discussed in a paragraph or more: National Independence/The country's founding story, how it became a country.

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.38 National culture (br_natlmen_cul)

Question: Following aspects of national life are discussed in a paragraph or more: National Culture(s): Including language, race or ethnicity, and/or religion, as well as things like music, dance, art, dress, food, or sports.

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.39 National symbols (br_natlmen_sym)

Question: Following aspects of national life are discussed in a paragraph or more: National Symbols: flag, animal, flower, the national anthem, a national oath, national buildings, national monuments.

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.40 National territory (br_natlmen_ter)

Question: Following aspects of national life are discussed in a paragraph or more: National Territory: national boundaries or distinctive aspects of national geography, e.g. discussion of borders, country's size, pride in natural beauty/geographic features.

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.41 Rights (br_rights)

Question: To what extent does the book discuss rights/freedoms/liberties?

Responses:

0: No/rarely.

1: Some.

2: A lot.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.42 Human Rights (br_hr)

Question: Does the text explicitly mention human rights

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.43 Citizen duties (br_duties)

Question: To what extent does the book discuss duties/responsibilities/obligations of citizenship? Responses:

- 0: No/rarely.
- 1: Some.
- 2: A lot.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.44 Inter-governmental organizations (br_igonmbr)

Question: Are inter-governmental organizations mentioned in at least a paragraph (e.g., the League of Nations, the United Nations, the Triple Alliance, the Triple Entente, Allies, Axis powers)?

Responses:

0: No.

1: Yes.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent

the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.45 International issue percentage (br_percintl)

Question: Approximate percentage of text that addresses international (non-national) issues.

Responses:

- 0: None of text addresses international issues.
- 1: 1-25%.
- 2: 26-50%.
- 3: 51-100%.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.1.46 Civics content (br_civ)

Question: Does the textbook present civics content (e.g. the structure and function of government, the legislative process, citizenship, voting)?

Responses:

- 0: No mention.
- 1: Brief mention (paragraph or section).
- 2: Chapter heading or many sections.
- 3: Over half of the chapters.

Notes: The unit of analysis in the original dataset is textbook-year. For years in which more than one textbook is recorded in the original dataset, values of this variable in this dataset represent the mean response across all textbooks in that year.

Countries: 83. Years: 1945-2012.

Citation: Bromley, Meyer, and Ramirez (2011).

4.2 Education Outcomes

4.2.1 Educational equality (v2peedueq)

Question: To what extent is high quality basic education guaranteed to all, sufficient to enable them to exercise their basic rights as adult citizens?

Clarification: Basic education refers to ages typically between 6 and 16 years of age but this varies slightly among countries.

Responses:

- 0: Extreme. Provision of high quality basic education is extremely unequal and at least 75 percent (%) of children receive such low-quality education that undermines their ability to exercise their basic rights as adult citizens.
- 1: Unequal. Provision of high quality basic education is extremely unequal and at least 25 percent (%) of children receive such low-quality education that undermines their ability to exercise their basic rights as adult citizens.
- 2: Somewhat equal. Basic education is relatively equal in quality but ten to 25 percent (%) of children receive such low-quality education that undermines their ability to exercise their basic rights as adult citizens.
- 3: Relatively equal. Basic education is overall equal in quality but five to ten percent (%) of

children receive such low-quality education that probably undermines their ability to exercise their basic rights as adult citizens.

4: Equal. Basic education is equal in quality and less than five percent (%) of children receive such low-quality education that probably undermines their ability to exercise their basic rights as adult citizens.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.2.2 Primary completion rate, total (wb_comp_rate_p)

Clarification: Primary completion rate, or gross intake ratio to the last grade of primary education, is the number of new entrants (enrollments minus repeaters) in the last grade of primary education, regardless of age, divided by the population at the entrance age for the last grade of primary education. Data limitations preclude adjusting for students who drop out during the final year of primary education.

Countries: 150. Years: 1970-2021.

Citation: The World Bank (2022).

4.2.3 School enrollment, primary (wb_enrollment_p)

Clarification: Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

Countries: 153. Years: 1970-2021.

Citation: The World Bank (2022).

4.2.4 School enrollment, secondary (wb_enrollment_s)

Clarification: Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.

Countries: 153. Years: 1970-2021.

Citation: The World Bank (2022).

4.2.5 Literacy rate, adult total (wb_literacy)

Clarification: Adult literacy rate is the percentage of people ages 15 and above who can both read and write with understanding a short simple statement about their everyday life.

Countries: 129. Years: 1972-2021.

Citation: The World Bank (2022).

4.2.6 Children out of school (wb_oos_p)

Clarification: Children out of school are the percentage of primary-school-age children who are not enrolled in primary or secondary school. Children in the official primary age group that are in preprimary education should be considered out of school.

Countries: 151. Years: 1970-2021.

Citation: The World Bank (2022).

4.2.7 Progression to secondary school (wb_progression_s)

Clarification: Progression to secondary school refers to the number of new entrants to the first grade of secondary school in a given year as a percentage of the number of students enrolled in the final grade of primary school in the previous year (minus the number of repeaters from the last grade of primary education in the given year).

Countries: 146. Years: 1970-2018.

Citation: The World Bank (2022).

4.2.8 Completion rate, primary (un_comp_rate_p)

Countries: 143. Years: 2000-2021.

Citation: UNESCO (2022).

4.2.9 Completion rate, lower secondary (un_comp_rate_sl)

Countries: 143. Years: 2000-2021.

Citation: UNESCO (2022).

4.2.10 Completion rate, upper secondary (un_comp_rate_su)

Countries: 143. Years: 2000-2021.

Citation: UNESCO (2022).

4.2.11 Out-of-school rate, primary (un_oos_p)

Countries: 145. Years: 2000-2021.

Citation: UNESCO (2022).

4.2.12 Out-of-school rate, lower secondary (un_oos_sl)

Countries: 141.

Years: 2000-2021.

Citation: UNESCO (2022).

4.2.13 Out-of-school rate, upper secondary (un_oos_su)

Countries: 142. Years: 2000-2021.

Citation: UNESCO (2022).

4.2.14 Preparation for future in mathematics, primary (un_prep_math_p)

Clarification: Proportion of children/young people at the age of primary education prepared for the future in mathematics.

Countries: 90. Years: 2003-2019.

Citation: UNESCO (2022).

4.2.15 Preparation for future in reading, primary (un_prep_read_p)

Clarification: Proportion of children/young people at the age of primary education prepared for the future in reading.

Countries: 81.

Years: 2001-2019.

Citation: UNESCO (2022).

4.2.16 Level of proficiency in functional literacy skills (un_skill_lit)

Clarification: Proportion of population achieving at least a fixed level of proficiency in functional literacy skills.

Countries: 50. Years: 2006-2017.

Citation: UNESCO (2022).

4.2.17 Level of proficiency in functional numeracy skills (un_skill_num)

Clarification: Proportion of population achieving at least a fixed level of proficiency in functional numeracy skills.

Countries: 39. Years: 2006-2017.

Citation: UNESCO (2022).

4.2.18 Education 15+ (e_peaveduc)

Question: What is the average years of education among citizens older than 15?

Notes: Missing data within a time–series is interpolated using linear interpolation for each country. In addition, data from the last recorded data point to the present is extrapolated.

Countries: 124. Years: 1945-2021.

Citation: Clio-Infra (2018).

4.2.19 Educational inequality, Gini (e_peedgini)

Question: How unequal is the level of education achieved by the population aged 15 years and older?

Clarification: Gini coefficient of educational inequality estimated from average education data.

Countries: 121. Years: 1945-2010.

Citation: Clio-Infra (2018).

4.2.20 Percentage of no schooling attained in population (bl_no_schooling)

 $Countries:\ 132.$

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.2.21 Percentage of primary schooling attained in population (bl_total_p)

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.2.22 Percentage of complete primary schooling attained in population (bl_completed_p)

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.2.23 Percentage of secondary schooling attained in population (bl_total_s)

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.2.25 Average years of schooling attained (bl_school_years_total)

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.2.26 Average years of primary schooling attained (bl_school_years_p)

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.2.27 Average years of secondary schooling attained (bl_school_years_s)

Countries: 132.

Years: 1950-2015 in 5 year intervals. Citation: Barro and Lee (2013).

4.3 Learning Outcomes

4.3.1 Harmonized learning outcome in mathematics, primary (hlo_math_p)

Clarification: International achievement tests are necessary for understanding and tracking the formation of human capital. However, such tests are administered primarily in high-income countries, limiting our ability to analyze learning patterns in low- and middle-income countries

that may have the most to gain from the formation of human capital. The Harmonized Learning Outcomes (HLO) database bridges this gap by constructing a globally comparable database of 164 countries from 2000 to 2017.

Countries: 80. Years: 2000-2015.

Citation: Angrist et al. (2021).

4.3.2 Harmonized learning outcome in reading, primary (hlo_read_p)

Clarification: International achievement tests are necessary for understanding and tracking the formation of human capital. However, such tests are administered primarily in high-income countries, limiting our ability to analyze learning patterns in low- and middle-income countries that may have the most to gain from the formation of human capital. The Harmonized Learning Outcomes (HLO) database bridges this gap by constructing a globally comparable database of 164 countries from 2000 to 2017.

Countries: 104. Years: 2000-2017.

Citation: Angrist et al. (2021).

4.3.3 Harmonized learning outcome in science, primary (hlo_sci_p)

Clarification: International achievement tests are necessary for understanding and tracking the formation of human capital. However, such tests are administered primarily in high-income countries, limiting our ability to analyze learning patterns in low- and middle-income countries that may have the most to gain from the formation of human capital. The Harmonized Learning Outcomes (HLO) database bridges this gap by constructing a globally comparable database of 164 countries from 2000 to 2017.

Countries: 66.

Years: 2003-2015.

Citation: Angrist et al. (2021).

4.3.4 Harmonized learning outcome in mathematics, secondary (hlo_math_s)

Clarification: International achievement tests are necessary for understanding and tracking the formation of human capital. However, such tests are administered primarily in high-income countries, limiting our ability to analyze learning patterns in low- and middle-income countries that may have the most to gain from the formation of human capital. The Harmonized Learning Outcomes (HLO) database bridges this gap by constructing a globally comparable database of 164 countries from 2000 to 2017.

Countries: 91. Years: 2000-2015.

Citation: Angrist et al. (2021).

4.3.5 Harmonized learning outcome in reading, secondary (hlo_read_s)

Clarification: International achievement tests are necessary for understanding and tracking the formation of human capital. However, such tests are administered primarily in high-income countries, limiting our ability to analyze learning patterns in low- and middle-income countries that may have the most to gain from the formation of human capital. The Harmonized Learning Outcomes (HLO) database bridges this gap by constructing a globally comparable database of 164 countries from 2000 to 2017.

Countries: 71.

Years: 2000-2015.

Citation: Angrist et al. (2021).

4.3.6 Harmonized learning outcome in science, secondary (hlo_sci_s)

Clarification: International achievement tests are necessary for understanding and tracking the formation of human capital. However, such tests are administered primarily in high-income countries, limiting our ability to analyze learning patterns in low- and middle-income countries that may have the most to gain from the formation of human capital. The Harmonized Learning Outcomes (HLO) database bridges this gap by constructing a globally comparable database of 164 countries from 2000 to 2017.

Countries: 89. Years: 2000-2015.

Citation: Angrist et al. (2021).

4.3.7 Average harmonized learning outcome score (ana_lo_score)

Clarification: Average learning outcomes from standardized, psychometrically-robust international and regional achievement tests. In order to maximize coverage by country, tests have been harmonized and pooled across subjects (math, reading, science) and levels (primary and secondary education).

Notes: 1970-2015 in 5 year intervals.

Countries: 125. Years: 1970-2015.

Citation: Altinok, Angrist, and Patrinos (2018).

4.3.8 Mean performance on the reading scale for fourth grade students (wb_lo_pirls_read)

Clarification: Mean performance on the reading scale for fourth grade students. Total is the average scale score for fourth graders on the PIRLS reading assessment. The scale centerpoint is 500. Data reflects country performance in the stated year, but may not be comparable across years or countries.

Countries: 54.

Years: 2001-2016 in 5 year intervals.. Citation: The World Bank (2022).

4.3.9 Mean performance on the mathematics scale (wb_lo_pisa_math)

Clarification: Average score of 15-year-old students on the PISA mathematics scale. The metric for the overall reading scale is based on a mean for participating OECD countries set at 500, with a standard deviation of 100.

Countries: 77.

Years: 2000-2018.

Citation: The World Bank (2022).

4.3.10 Mean performance on the reading scale (wb_lo_pisa_read)

Clarification: Average score of 15-year-old students on the PISA reading scale. The metric for the overall reading scale is based on a mean for participating OECD countries set at 500, with a standard deviation of 100.

Countries: 77. Years: 2000-2018.

Citation: The World Bank (2022).

4.3.11 Mean performance on the science scale (wb_lo_pisa_sci)

Clarification: Average score of 15-year-old students on the PISA science scale. The metric for the overall reading scale is based on a mean for participating OECD countries set at 500, with a standard deviation of 100.

Countries: 77. Years: 2000-2018.

Citation: The World Bank (2022).

4.3.12 Mean performance in math, fourth grade students (wb_lo_timms_math4)

Clarification: Mean performance on the mathematics scale for fourth grade students. The scale centerpoint is 500. Data reflects country performance in the stated year according to TIMSS reports, but may not be comparable across years or countries.

Countries: 67.

Years: 1995-2019 in 4 year intervals.. Citation: The World Bank (2022).

4.3.13 Mean performance on the mathematics scale for eighth grade students (wb lo timms math8)

Clarification: Mean performance on the mathematics scale for eighth grade students, total is the average scale score for 4th graders on the science assessment. The scale centerpoint is 500. Data reflects country performance in the stated year according to TIMSS reports, but may not be comparable across years or countries.

Countries: 68.

Years: 1995-2019 in 4 year intervals.. Citation: The World Bank (2022).

4.3.14 Mean performance on the science scale for fourth grade students (wb_lo_timms_sci4)

Clarification: Mean performance on the science scale for fourth grade students, total is the average scale score for 4th graders on the science assessment. The scale centerpoint is 500. Data reflects country performance in the stated year according to TIMSS reports, but may not be comparable across years or countries.

Countries: 66.

Years: 1995-2019 in 4 year intervals.. Citation: The World Bank (2022).

4.3.15 Mean performance on the science scale for eighth grade students $(wb_lo_timms_sci8)$

Clarification: Mean performance on the science scale for eighth grade students, total is the average scale score for 4th graders on the science assessment. The scale centerpoint is 500. Data reflects country performance in the stated year according to TIMSS reports, but may not be comparable across years or countries.

Countries: 68.

Years: 1995-2019 in 4 year intervals.. Citation: The World Bank (2022).

4.4 Teachers

4.4.1 Pupil-teacher ratio, primary (wb_pt_ratio_p)

Clarification: Primary school pupil-teacher ratio is the average number of pupils per teacher in primary school.

Countries: 151.
Years: 1970-2019.

Citation: The World Bank (2022).

4.4.2 Pupil-teacher ratio, secondary (wb_pt_ratio_s)

Clarification: Primary school pupil-teacher ratio is the average number of pupils per teacher in primary school.

Countries: 150. Years: 1970-2019.

Citation: The World Bank (2022).

4.4.3 Trained teachers, primary (wb_tteach_p)

Clarification: Trained teachers in primary education are the percentage of primary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.

Countries: 100. Years: 1998-2021.

Citation: The World Bank (2022).

4.4.4 Trained teachers, secondary (wb_tteach_s)

Clarification: Trained teachers in secondary education are the percentage of secondary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in a given country.

Countries: 94. Years: 1998-2021.

Citation: The World Bank (2022).

4.4.5 Pupil-qualified teacher ratio, primary (un_pqt_ratio_p)

Countries: 100. Years: 2000-2021.

Citation: UNESCO (2022).

4.4.6 Pupil-qualified teacher ratio, secondary (un_pqt_ratio_s)

Countries: 88.

Years: 2000-2021.

Citation: UNESCO (2022).

4.4.7 Pupil-trained teacher ratio, primary (un_ptt_ratio_p)

Countries: 105. Years: 2000-2021.

Citation: UNESCO (2022).

4.4.8 Pupil-trained teacher ratio, secondary (un_ptt_ratio_s)

Countries: 95. Years: 2000-2021.

Citation: UNESCO (2022).

4.4.9 Teacher attrition rate, primary (un_teach_att_p)

Countries: 53.
Years: 2011-2021.

Citation: UNESCO (2022).

4.4.10 Teacher attrition rate, secondary (un_teach_att_s)

Countries: 31.

Years: 2011-2021.

Citation: UNESCO (2022).

4.4.11 Proportion of teachers with minimum qualifications, primary (un_teach_min_qual_p)

Countries: 105. Years: 2000-2021.

Citation: UNESCO (2022).

Countries: 99. Years: 2000-2021.

Citation: UNESCO (2022).

4.4.13 Percentage of qualified teachers, primary (un_teach_qual_p)

Countries: 102. Years: 2000-2021.

Citation: UNESCO (2022).

4.4.14 Percentage of qualified teachers, secondary (un_teach_qual_s)

Countries: 93.

Years: 2000-2021.

Citation: UNESCO (2022).

4.4.15 Relative average teacher salary in primary education (un_teach_rsalary_p)

Clarification: Relative to other professions requiring a comparable level of qualification.

Countries: 36.
Years: 2009-2021.

Citation: UNESCO (2022).

4.4.16 Relative average teacher salary in upper secondary education (un_teach_rsalary_su)

Clarification: Relative to other professions requiring a comparable level of qualification.

Countries: 34. Years: 2009-2021.

Citation: UNESCO (2022).

4.4.17 Teachers' average age (talis_avgage)

Countries: 45. Years: 2018-2018.

Citation: OECD (2018).

4.4.18 Years of teachers' average work experience (talis_avgwp)

Countries: 45.
Years: 2018-2018.

Citation: OECD (2018).

4.4.19 Teacher control over course content (talis_cntctrl)

Clarification: Percentage of teachers who 'agree' or 'strongly agree' that they have control over determining course content.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.20 Teacher responsibility for school policies, instruction and curriculum (as reported by principals) (talis_prtchrsp)

Clarification: Percentage of principals who report that teachers have significant responsibility for the majority of tasks concerning school policies, instruction and curriculum.

Countries: 44. Years: 2018.

Citation: OECD (2018).

4.4.21 Teachers give tasks with no obvious solution (talis_opnsl)

Clarification: Percentage of teachers who report to 'frequently' or 'always' giving tasks for which there is no obvious solution.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.22 Teachers give tasks that require critical thinking (talis_thcrit)

Clarification: Percentage of teachers who report to 'frequently' or 'always' giving tasks that require students to think critically.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.23 No participation in induction activities at current school (talis_noind)

Clarification: Percentage of teachers who did not take part in formal or informal induction activities at the current school.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.24 Professional development in the last 12 months (talis_profdev)

Clarification: Percentage of teachers who undertook professional development in the last 12 months.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.25 Feedback received (talis_fdb)

Clarification: Percentage of teachers who received feedback at some point, based on at least four different methods.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.26 Observation and coaching in the last 12 months (talis_cch)

Clarification: Percentage of teachers who participated in peer and/or self-observation and coaching as part of a formal school arrangement in the 12 months prior to the survey.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.27 Belief: help students value learning (talis_hplrn)

Clarification: Percentage of teachers who believe they can help their students to value learning.

Countries: 44.
Years: 2018.

Citation: OECD (2018).

4.4.28 Belief: help students to think critically (talis_hpcrit)

Clarification: Percentage of teachers who believe they can help their students to think critically.

Countries: 44. Years: 2018.

Citation: OECD (2018).

4.4.29 Importance of influencing child development (talis_infldev)

Clarification: Percentage of teachers who report that influencing the development of children and young people was of 'moderate importance' or 'high importance' in deciding to become a teacher.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.30 Importance of contributing to society (talis_contrsoc)

Clarification: Percentage of teachers who report that providing a contribution to society was of 'moderate importance' or 'high importance' in deciding to become a teacher.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.31 Value of teaching profession (talis_tchval)

Clarification: Percentage of teachers who 'agree' or 'strongly agree' that the teaching profession is valued in society.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.32 Teaching students whose first language is different from language of instruction (talis_lngdiff)

Clarification: Teachers teaching in classes with more than 10% of students whose first language is different from the language of instruction.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.33 Content pedagogy and classroom practice including in formal training (talis_frmtrn)

Clarification: Teachers for whom content pedagogy and classroom practice in some or all subjects taught were included in their initial formal education or training.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.34 Multicultural teaching included in formal training (talis_mlctrn)

Clarification: Teachers for whom 'teaching in a multicultural or multilingual setting' was included in their formal education or training.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.35 Prepared to teach in multicultural setting (talis_mlcprep)

Clarification: Percentage of teachers who felt 'well prepared' or 'very well prepared' for teaching in a multicultural or multilingual setting.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.36 Satisfaction with job (talis_stjob)

Clarification: Percentage of teachers who are, all in all, satisfied with their job.

 $Countries:\ 45.$

Years: 2018.

Citation: OECD (2018).

4.4.37 Satisfaction with salary (talis_stsal)

Clarification: Percentage of teachers who are satisfied with the salary they receive for their work.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.4.38 Satisfaction with contract/employment (talis_stemply)

Clarification: Percentage of teachers who, apart from their salary, are satisfied with the terms of their teaching contract/employment.

Countries: 45. Years: 2018.

Citation: OECD (2018).

4.5 Education Expenditures

4.5.1 Government expenditure on education, total (% of GDP) (wb_govexp_pctgdp)

Clarification: General government expenditure on education (current, capital, and transfers) is expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments.

Countries: 152. Years: 1970-2021.

Citation: The World Bank (2022).

4.5.2 Government expenditure on education, total (% of government expenditure) (wb_govexp_pctgovexp)

Clarification: General government expenditure on education (current, capital, and transfers) is expressed as a percentage of total general government expenditure on all sectors (including health, education, social services, etc.). It includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments.

Countries: 152. Years: 1980-2021.

Citation: The World Bank (2022).

4.5.3 Government expenditure per student, primary (% of GDP per capita) (wb_govexp_student_p)

Clarification: Government expenditure per student is the average general government expenditure (current, capital, and transfers) per student in the given level of education, expressed as a percentage of GDP per capita.

Countries: 131. Years: 1995-2018.

Citation: The World Bank (2022).

4.5.4 Government expenditure per student, secondary (% of GDP per capita) (wb_govexp_student_s)

Clarification: Government expenditure per student is the average general government expenditure (current, capital, and transfers) per student in the given level of education, expressed as a percentage of GDP per capita.

Countries: 127. Years: 1995-2018.

Citation: The World Bank (2022).

4.5.5 Government expenditure on education as a percentage of GDP (%) (un_govexp_pctgdp)

Countries: 150.
Years: 2000-2021.

Citation: UNESCO (2022).

4.6 Education System

4.6.1 Compulsory education, duration (years) (wb_compulsory_yrs)

Clarification: Duration of compulsory education is the number of years that children are legally obliged to attend school.

Countries: 146. Years: 1975-2021.

Citation: The World Bank (2022).

4.6.2 Guaranteed years of free primary and secondary education (un_compulsory_yrs_free)

Clarification: Number of years of free primary and secondary education guaranteed in legal frameworks

Countries: 145.
Years: 2000-2021.

Citation: UNESCO (2022).

4.6.3 Guaranteed years of compulsory primary and secondary education (un_compulsory_yrs_legal)

Clarification: Number of years of compulsory primary and secondary education guaranteed in legal frameworks

Countries: 155. Years: 2000-2021.

Citation: UNESCO (2022).

4.6.4 Nationally-representative learning assessment in math, primary (un_nat_assess_math_p)

Clarification: The variable is coded as 1 if such a learning assessment is administered, and 0 otherwise.

Notes: This is a binary variable that indicates whether such administration exists.

Countries: 155. Years: 2014-2021.

Citation: UNESCO (2022).

4.6.5 Nationally-representative learning assessment in math, lower secondary (un_nat_assess_math_sl)

Clarification: The variable is coded as 1 if such a learning assessment is administered, and 0 otherwise.

Notes: This is a binary variable that indicates whether such administration exists.

Countries: 155. Years: 2014-2021.

Citation: UNESCO (2022).

Clarification: The variable is coded as 1 if such a learning assessment is administered, and 0 otherwise.

Countries: 155. Years: 2014-2021.

Citation: UNESCO (2022).

4.6.7 Nationally-representative learning assessment in reading, lower secondary (un_nat_assess_read_sl)

 ${\it Clarification:}$ The variable is coded as 1 if such a learning assessment is administered, and 0 otherwise.

Countries: 155. Years: 2014-2021.

Citation: UNESCO (2022).

4.6.8 Equal access to higher education (ccpcnc_achighed)

Question: Does the constitution guarantee equal access to higher education?

Clarification: Yes, but qualified means that access to higher education is limited by either ability or on a competitive basis.

Responses:

- 1: Yes.
- 2: Yes, but qualified.
- 3: No.

96: Other. Countries: 154.

Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.6.9 Compulsory education (ccpcnc_edcomp)

Question: Does the constitution stipulate that education be compulsory until at least some level? Responses:

1: Yes.

2: No.

96: Other.

99: Not applicable.

Countries: 154. Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.6.10 Compulsory education age (ccpcnc_edcompl)

Responses:

1: Basic/elementary/primary.

2: Secondary/intermediate.

90: Left explicitly to non-constitutional law.

96: Other.

98: Not specified.

99: Not applicable.

Countries: 154. Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.6.11 Free education (ccpcnc_edfree)

Question: Does the constitution stipulate that education be free, at least up to some level?

Clarification: A statement of public education is not enough to answer "Yes" but should be answered "Other." In order to answer "Yes", there must be some reference to education at no cost (e.g. "free public education").

Responses:

1: Yes.

2: No.

96: Other.

Countries: 154.

Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.6.12 Free education age (ccpcnc_edfreel)

Question: To what level (or year of age) does the constitution stipulate that education should be free?

Responses:

- 1: Basic/elementary/primary.
- 2: Secondary/intermediate.
- 3: All levels.
- 90: Left explicitly to non-constitutional law.
- 96: Other.
- 98: Not specified.
- 99: Not applicable.

Countries: 154.

Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.6.13 Education provisions (ccpcnc_educate)

Question: Does the constitution contain provisions concerning education?

Responses:

1: Yes.

2: No.

96: Other.

Countries: 154.

Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.6.14 Number of education reforms (werd_ref_ct)

Clarification: Number of education reforms recorded in the data source for a given country-year.

Countries: 150. Years: 1945-2021.

Citation: Bromley et al. (2022).

4.7 Academic Space

4.7.1 Freedom of Expression and Alternative Sources of Information index $(v2x_freexp_altinf)$

Question: To what extent does government respect press and media freedom, the freedom of ordinary people to discuss political matters at home and in the public sphere, as well as the freedom of academic and cultural expression?

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.2 Academic Freedom Index (v2xca_academ)

Question: To what extent is academic freedom respected?

Clarification: Academic freedom is understood as the right of academics, without constriction by prescribed doctrine, to freedom of teaching and discussion, freedom in carrying out research and disseminating and publishing the results thereof, freedom to express freely their opinion about the institution or system in which they work, freedom from institutional censorship and freedom to participate in professional or representative academic bodies (UNESCO 1997 Recommendation concerning the Status of Higher-Education Teaching Personnel). The Academic Freedom Index is designed to provide an aggregated measure that captures the de facto realization of academic freedom, including the degree to which higher-education institutions are autonomous.

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.3 Freedom of academic and cultural expression (v2clacfree)

Question: Is there academic freedom and freedom of cultural expression related to political issues? Responses:

- 0: Not respected by public authorities. Censorship and intimidation are frequent. Academic activities and cultural expressions are severely restricted or controlled by the government.
- 1: Weakly respected by public authorities. Academic freedom and freedom of cultural expression are practiced occasionally, but direct criticism of the government is mostly met with repression.
- 2: Somewhat respected by public authorities. Academic freedom and freedom of cultural expression are practiced routinely, but strong criticism of the government is sometimes met with repression.
- 3: Mostly respected by public authorities. There are few limitations on academic freedom and freedom of cultural expression, and resulting sanctions tend to be infrequent and soft.
- 4: Fully respected by public authorities. There are no restrictions on academic freedom or cultural expression.

Scale: Ordinal, converted to interval by a measurement model.

Countries: 160.

Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.4 Constitutional protection for academic freedom (v2caprotac)

Question: Do constitutional provisions for the protection of academic freedom exist?

Responses:

0: No.

1: Yes.

95: Constitution suspended.

97: Other, or undetermined.

99: Missing.

Scale: Ordinal.
Countries: 156.
Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.5 Freedom to research and teach (v2cafres)

Question: To what extent are scholars free to develop and pursue their own research and teaching agendas without interference?

Clarification: Examples of interference include research agendas or teaching curricula being drafted, restricted, or fully censored by a non-academic actor; scholars being externally induced, through possible reprisals, to self-censor; or the university administration abusing its position of power to impose research or teaching agendas on individual academics. It also includes public pressure on academics - offline and online. We do not consider as interference restrictions that are due to research priorities, as well as ethical and quality standards, freely defined by the scholarly community as well as the development of standardized curricula by academics that aim to structure and enhance teaching.

Responses:

- 0: Completely restricted. When determining their research agenda or teaching curricula, scholars are, across all disciplines, consistently subject to interference or incentivized to self-censor.
- 1: Severely restricted. When determining their research agenda or teaching curricula, scholars are, in some disciplines, consistently subject to interference or incentivized to self-censor.
- 2: Moderately restricted. When determining their research agenda or teaching curricula, scholars are occasionally subject to interference or incentivized to self-censor.
- 3: Mostly free. When determining their research agenda or teaching curricula, scholars are rarely subject to interference or incentivized to self-censor.
- 4: Fully free. When determining their research agenda or teaching curricula, scholars are not subject to interference or incentivized to self-censor.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.6 Freedom of academic exchange and dissemination (v2cafexch)

Question: To what extent are scholars free to exchange and communicate research ideas and findings?

Clarification: Free academic exchange includes uncensored access to research material, unhindered participation in national or international academic conferences, and the uncensored publication of academic material. Free dissemination refers to the unrestricted possibility for scholars to share and explain research findings in their field of expertise to non-academic audiences through media engagement or public lectures.

Responses:

- 0: Completely restricted. Academic exchange and dissemination is, across all disciplines, consistently subject to censorship, self-censorship or other restrictions.
- 1: Severely restricted. Academic exchange and dissemination is, in some disciplines, consistently subject to censorship, self-censorship or other restrictions.
- 2: Moderately restricted. Academic exchange and dissemination is occasionally subject to censorship, self-censorship or other restrictions.
- 3: Mostly free. Academic exchange and dissemination is rarely subject to censorship, self-censorship or other restrictions.
- 4: Fully free. Academic exchange and dissemination is not subject to censorship, self-censorship or other restrictions.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.7 Institutional autonomy (v2cainsaut)

Question: To what extent do universities exercise institutional autonomy in practice?

Clarification: Institutional autonomy "means the independence of institutions of higher education from the State and all other forces of society, to make decisions regarding its internal government, finance, administration, and to establish its policies of education, research, extension work and other related activities" (Lima Declaration). Note that institutional autonomy does not preclude universities from accepting state or third party funding, but does require that they remain in charge of all types of decisions listed above. Institutional autonomy does also not preclude a public oversight role by the state over universities' spending of public funds.

Responses:

- 0: No autonomy at all. Universities do not exercise any degree of institutional autonomy; non-academic actors control decision-making.
- 1: Minimal autonomy. Universities exercise only very limited institutional autonomy; non-academic actors interfere extensively with decision-making.
- 2: Moderate autonomy. Universities exercise some institutional autonomy; non-academic actors interfere moderately with decision-making.
- 3: Substantial autonomy. Universities exercise institutional autonomy to a large extent; non-academic actors have only rare and minimal influence on decision-making.
- 4: Complete autonomy. Universities exercise complete institutional autonomy from non-academic actors.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.8 Campus integrity (v2casurv)

Question: To what extent are campuses free from politically motivated surveillance or security infringements?

Clarification: "Campus" refers to all university buildings as well as digital research and teaching platforms. Campus integrity means the preservation of an open learning and research environment marked by an absence of an externally induced climate of insecurity or intimidation on campus. Examples of infringements of campus integrity are politically motivated on-campus or digital surveillance, presence by intelligence or security forces, presence of student militias, or violent attacks by third parties, if specifically targeting universities to repress academic life on campus. Note that we are only interested in politically motivated infringements and targeted attacks on campus integrity, not in non-political security concerns or proportionate security measures taken on campus to address these.

Responses:

- 0: Completely restricted. Campus integrity is fundamentally undermined by extensive surveillance and severe intimidation, including violence or closures.
- 1: Severely restricted. Campus integrity is to a large extent undermined by surveillance and intimidation, at times including violence or closures.
- 2: Moderately restricted. Campus integrity is challenged by some significant cases of surveillance or intimidation.
- 3: Mostly free. Campus integrity is to a large extent respected, with only minor cases of surveillance or intimidation.
- 4: Fully free. Campus integrity is comprehensively respected; there are no cases of surveillance or intimidation.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.9 Academics as critics (v2cacritic)

Question: To what extent do scholars and university students publicly criticize government policies?

Clarification: "This question is only about the extent scholars and students actually criticize government policies – irrespective of how free they are to do so and whether they are met with repression or not. We ask you simply to consider to what extent scholars and students are noticeable as government critics in the public discourse. Public criticism of government policies can be conveyed for example through the publication of op-eds or social media posts on current affairs, the signing of open letters or petitions, the taking part in or organization of public protests, or the holding of critical lectures to students or the public.

Responses:

- 0: Not at all. Scholars and university students do not publicly express criticism of government policies.
- 1: To a small extent. Scholars and university students publicly express minor criticism of government policies.
- 2: To a moderate extent. Scholars and university students publicly express moderate criticism of government policies.
- 3: To a large extent. Scholars and university students publicly express substantive criticism of government policies.
- 4: To a major extent. Scholars and university students publicly express fundamental criticism of government policies.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.7.10 International legal commitment to academic freedom under ICESCR (v2caacadfree)

Question: Is the state party to the International Covenant on Economic, Social and Cultural Rights (ICESCR) without reservations to article 15 (right to science)?

Clarification: This indicator captures the country's international legal commitment to academic freedom. It indicates whether the country is party to the International Covenant on Economic, Social and Cultural Rights without having made explicit reservations to its article 15 (right to science), which stipulates, among other things, that states parties "undertake to respect the freedom indispensable for scientific research".

Responses:

- 0: State not a party to ICESCR, or made reservations to article 15.
- 1: State is party to ICESCR without reservations to article 15, but treaty not yet in force.

2: ICESCR in force and signed without reservations to article 15.

3: ICESCR in force and ratified without reservations to article 15.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 157. Years: 1966-2021.

Citation: Coppedge et al. (2023).

4.7.11 Academic freedom (ccpcnc_acfree)

Question: Does the constitution guarantee academic freedom?

Responses:

Yes.
 No.
 Other.

Countries: 154. Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

4.8 Media and the Internet

4.8.1 Government censorship effort — Media (v2mecenefm)

Question: Does the government directly or indirectly attempt to censor the print or broadcast media?

Clarification: Indirect forms of censorship might include politically motivated awarding of broadcast frequencies, withdrawal of financial support, influence over printing facilities and distribution networks, selected distribution of advertising, onerous registration requirements, prohibitive tariffs, and bribery. We are not concerned with censorship of non-political topics such as child pornography, statements offensive to a particular religion, or defamatory speech unless this sort of censorship is used as a pretext for censoring political speech.

Responses:

- 0: Attempts to censor are direct and routine.
- 1: Attempts to censor are indirect but nevertheless routine.
- 2: Attempts to censor are direct but limited to especially sensitive issues.
- 3: Attempts to censor are indirect and limited to especially sensitive issues.
- 4: The government rarely attempts to censor major media in any way, and when such exceptional attempts are discovered, the responsible officials are usually punished.

Scale: Ordinal, converted to interval by a measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.2 Internet censorship effort (v2mecenefi)

Question: Does the government attempt to censor information (text, audio, or visuals) on the Internet?

Clarification: Censorship attempts include Internet filtering (blocking access to certain websites or browsers), denial-of-service attacks, and partial or total Internet shutdowns. We are not concerned with censorship of topics such as child pornography, highly classified information such as military or intelligence secrets, statements offensive to a particular religion, or defamatory speech unless this sort of censorship is used as a pretext for censoring political information or opinions. We are also not concerned with the extent of internet access, unless there is absolutely no access at all (in which case the coding should be 0).

Responses:

0: The government successfully blocks Internet access except to sites that are pro-government

or devoid of political content.

- 1: The government attempts to block Internet access except to sites that are pro-government or devoid of political content, but many users are able to circumvent such controls.
- 2: The government allows Internet access, including to some sites that are critical of the government, but blocks selected sites that deal with especially politically sensitive issues.
- 3: The government allows Internet access that is unrestricted, with the exceptions mentioned above.

Scale: Ordinal, converted to interval by a measurement model.

Countries: 160. Years: 1993-2021.

Citation: Coppedge et al. (2023).

4.8.3 Internet binary (v2mecenefibin)

Question: Is there Internet in this country?

Responses:

0: No. 1: Yes.

Scale: Dichotomous, converted to interval by a measurement model.

Countries: 160. Years: 1993-2021.

Citation: Coppedge et al. (2023).

4.8.4 Print/broadcast media critical (v2mecrit)

Question: Of the major print and broadcast outlets, how many routinely criticize the government? Responses:

0: None.

- 1: Only a few marginal outlets.
- 2: Some important outlets routinely criticize the government but there are other important outlets that never do.
- 3: All major media outlets criticize the government at least occasionally.

Scale: Ordinal, converted to interval by a measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.5 Print/broadcast media perspectives (v2merange)

Question: Do the major print and broadcast media represent a wide range of political perspectives? Responses:

- 0: The major media represent only the government's perspective.
- 1: The major media represent only the perspectives of the government and a governmentapproved, semi-official opposition party.
- 2: The major media represent a variety of political perspectives but they systematically ignore at least one political perspective that is important in this society.
- 3: All perspectives that are important in this society are represented in at least one of the major media.

Scale: Ordinal, converted to interval by a measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.6 Harassment of journalists (v2meharjrn)

Question: Are individual journalists harassed — i.e., threatened with libel, arrested, imprisoned, beaten, or killed — by governmental or powerful nongovernmental actors while engaged in legitimate journalistic activities?

Responses:

- 0: No journalists dare to engage in journalistic activities that would offend powerful actors because harassment or worse would be certain to occur.
- 1: Some journalists occasionally offend powerful actors but they are almost always harassed or worse and eventually are forced to stop.
- 2: Some journalists who offend powerful actors are forced to stop but others manage to continue practicing journalism freely for long periods of time.
- 3: It is rare for any journalist to be harassed for offending powerful actors, and if this were to happen, those responsible for the harassment would be identified and punished.
- 4: Journalists are never harassed by governmental or powerful nongovernmental actors while engaged in legitimate journalistic activities.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.7 Media self-censorship (v2meslfcen)

Question: Is there self-censorship among journalists when reporting on issues that the government considers politically sensitive?

Responses:

- 0: Self-censorship is complete and thorough.
- 1: Self-censorship is common but incomplete.
- 2: There is self-censorship on a few highly sensitive political issues but not on moderately sensitive issues.
- 3: There is little or no self-censorship among journalists.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.8 Media bias (v2mebias)

Question: Is there media bias against opposition parties or candidates?

Clarification: We ask you to take particular care in rating the year-to-year variation on this question if media bias tends to increase or decrease in election years. Coverage can be considered "more or less impartial" when the media as a whole present a mix of positive and negative coverage of each party or candidate.

Responses:

- 0: The print and broadcast media cover only the official party or candidates, or have no political coverage, or there are no opposition parties or candidates to cover.
- 1: The print and broadcast media cover more than just the official party or candidates but all the opposition parties or candidates receive only negative coverage.
- 2: The print and broadcast media cover some opposition parties or candidates more or less impartially, but they give only negative or no coverage to at least one newsworthy party or candidate.
- 3: The print and broadcast media cover opposition parties or candidates more or less impartially, but they give an exaggerated amount of coverage to the governing party or candidates.
- 4: The print and broadcast media cover all newsworthy parties and candidates more or less impartially and in proportion to their newsworthiness.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.9 Media corrupt (v2mecorrpt)

Question: Do journalists, publishers, or broadcasters accept payments in exchange for altering news coverage?

Responses:

- 0: The media are so closely directed by the government that any such payments would be either unnecessary to ensure pro-government coverage or ineffective in producing anti-government coverage.
- 1: Journalists, publishers, and broadcasters routinely alter news coverage in exchange for payments.
- 2: It is common, but not routine, for journalists, publishers, and broadcasters to alter news coverage in exchange for payments.
- 3: It is not normal for journalists, publishers, and broadcasters to alter news coverage in exchange for payments, but it happens occasionally, without anyone being punished.
- 4: Journalists, publishers, and broadcasters rarely alter news coverage in exchange for payments, and if it becomes known, someone is punished for it.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 1945-2021.

Citation: Coppedge et al. (2023).

4.8.10 Government Internet filtering capacity (v2smgovfilcap)

Question: Independent of whether it actually does so in practice, does the government have the technical capacity to censor information (text, audio, images, or video) on the Internet by filtering (blocking access to certain websites) if it decided to?

Responses:

- 0: The government lacks any capacity to block access to any sites on the Internet.
- 1: The government has limited capacity to block access to a few sites on the Internet.
- 2: The government has adequate capacity to block access to most, but not all, specific sites on the Internet if it wanted to.
- 3: The government has the capacity to block access to any sites on the Internet if it wanted to.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.11 Government Internet filtering in practice (v2smgovfilprc)

Question: How frequently does the government censor political information (text, audio, images, or video) on the Internet by filtering (blocking access to certain websites)?

Responses:

- 0: Extremely often. It is a regular practice for the government to remove political content, except to sites that are pro-government.
- 1: Often. The government commonly removes online political content, except sites that are pro-government.
- 2: Sometimes. The government successfully removes about half of the critical online political content
- 3: Rarely. There have been only a few occasions on which the government removed political

content.

4: Never, or almost never. The government allows Internet access that is unrestricted, with the exceptions mentioned in the clarifications section.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.12 Government Internet shut down capacity (v2smgovshutcap)

Question: Independent of whether it actually does so in practice, does the government have the technical capacity to actively shut down domestic access to the Internet if it decided to?

Clarification: A domestic Internet connection is any connection originating physically within the country, whether over wired, wireless, or satellite networks. This question asks what proportion of potential Internet connections of domestic origin the government has the capacity to render inoperable.

Responses:

- 0: The government lacks the capacity to shut down any domestic Internet connections.
- 1: The government has the capacity to shut down roughly a quarter of domestic access to the Internet
- 2: The government has the capacity to shut down roughly half of domestic access to the Internet.
- 3: The government has the capacity to shut down roughly three quarters of domestic access to the Internet.
- 4: The government has the capacity to shut down all, or almost all, domestic access to the Internet.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.13 Government Internet shut down in practice (v2smgovshut)

Question: How often does the government shut down domestic access to the Internet?

Responses:

- 0: Extremely often. It is a regular practice for the government to shut down domestic access to the Internet.
- 1: Often. The government shut down domestic access to the Internet numerous times this year.
- 2: Sometimes. The government shut down domestic access to the Internet several times this year.
- 3: Rarely but there have been a few occasions throughout the year when the government shut down domestic access to Internet.
- 4: Never, or almost never. The government does not typically interfere with the domestic access to the Internet.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.14 Government social media shut down in practice (v2smgovsm)

Question: How often does the government shut down access to social media platforms?

0: Extremely often. It is a regular practice for the government to shut down access to social

media.

- 1: Often. The government shuts down access to social media numerous times this year.
- 2: Sometimes. The government shuts down access to social media several times this year.
- 3: Rarely. There have been a few occasions throughout the year when the government shuts down access to social media.
- 4: Never, or almost never. The government does not interfere with the access to social media, except in the cases mentioned in the clarifications section.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.15 Government social media alternatives (v2smgovsmalt)

Question: How prevalent is the usage of social media platforms that are wholly controlled by either the government or its agents in this country?

Responses:

- 0: Essentially all social media usage takes place on platforms controlled by the state.
- 1: Most usage of social media is on state-controlled platforms, although some groups use nonstate-controlled alternatives.
- 2: There is significant usage of both state-controlled and non-state-controlled social media platforms.
- 3: While some state-controlled social media platforms exist, their usage only represents a small share of social media usage in the country.
- 4: Practically no one uses state-controlled social media platforms.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.16 Government social media monitoring (v2smgovsmmon)

Question: How comprehensive is the surveillance of political content in social media by the government or its agents?

Responses:

- 0: Extremely comprehensive. The government surveils virtually all content on social media.
- 1: Mostly comprehensive. The government surveils most content on social media, with comprehensive monitoring of most key political issues.
- 2: Somewhat comprehensive. The government does not universally surveil social media but can be expected to surveil key political issues about half the time.
- 3: Limited. The government only surveils political content on social media on a limited basis.
- 4: Not at all, or almost not at all. The government does not surveil political content on social media, with the exceptions mentioned in the clarifications section.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.17 Government social media censorship in practice (v2smgovsmcenprc)

Question: To what degree does the government censor political content (i.e., deleting or filtering specific posts for political reasons) on social media in practice?

Responses:

- 0: The government simply blocks all social media platforms.
- 1: The government successfully censors all social media with political content.

- 2: The government successfully censors a significant portion of political content on social media, though not all of it.
- 3: The government only censors social media with political content that deals with especially sensitive issues.
- 4: The government does not censor political social media content, with the exceptions mentioned in the clarifications section.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.18 Internet legal regulation content (v2smregcon)

Question: What type of content is covered in the legal framework to regulate Internet?

Responses:

- 1: The state can remove most content, and the law protects speech in only specific, and politically uncontroversial contexts.
- 2: The legal framework is ambiguous. The state can remove some politically sensitive content, while other is protected by law.
- 3: The law protects most political speech, but the state can remove especially politically controversial content.
- 4: The law protects political speech, and the state can only remove content if it violates well-established legal criteria.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.19 Government capacity to regulate online content (v2smregcap)

Question: Does the government have sufficient staff and resources to regulate Internet content in accordance with existing law?

Responses:

- 0: No, almost all online activity happens outside of reach of the state, where it lacks the capacity to remove illegal content.
- 1: Not really. The state has extremely limited resources to regulate online content.
- 2: Somewhat. The state has the capacity to regulate only some online content or some portions of the law.
- 3: Mostly. The state has robust capacity to regulate online content, though not enough to regulate all content and all portions of the law.
- 4: Yes, the government has sufficient capacity to regulate all online content.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.20 Government online content regulation approach (v2smregapp)

Question: Does the government use its own resources and institutions to monitor and regulate online content or does it distribute this regulatory burden to private actors such as Internet service providers?

Responses:

- 0: All online content monitoring and regulation is done by the state.
- 1: Most online content monitoring and regulation is done by the state, though the state involves private actors in a limited way.

- 2: Some online content monitoring and regulation is done by the state, but the state also involves private actors in monitoring and regulation in various ways.
- 3: The state does little online content monitoring and regulation, and entrusts most of the monitoring and regulation to private actors.
- 4: The state off-loads all online content monitoring and regulation to private actors.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.21 Online media existence (v2smonex)

Question: Do people consume domestic online media?

Responses:

- 0: Not at all. No one consumes domestic online media. Skip next question if this answer is selected.
- 1: Limited. Domestic online media consumption is limited.
- 2: Relatively extensive. Domestic online media consumption is common.
- 3: Extensive. Almost everyone consumes domestic online media.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.22 Online media perspectives (v2smonper)

Question: Do the major domestic online media outlets represent a wide range of political perspectives?

Responses:

- 0: The major domestic online media outlets represent only the government's perspective.
- 1: The major domestic online media outlets represent only the perspectives of the government and a government approved, semi-official opposition party.
- 2: The major domestic online media outlets represent a variety of political perspectives but they systematically ignore at least one political perspective that is important in this society.
- 3: All perspectives that are important in this society are represented in at least one of the major domestic online media outlets.
- 4: All perspectives that are important in this society are represented in many major domestic online media outlets.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.23 Online media fractionalization (v2smmefra)

Question: Do the major domestic online media outlets give a similar presentation of major (political) news?

Responses:

- 0: No. The major domestic online media outlets give opposing presentation of major events.
- 1: Not really. The major domestic online media outlets differ greatly in the presentation of major events.
- 2: Sometimes. The major domestic online media outlets give a similar presentation of major events about half the time.
- 3: Mostly. The major domestic online media outlets mostly give a similar presentation of major events.

4: Yes. Although there are small differences in representation, the major domestic online media outlets give a similar presentation of major events.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.24 Arrests for political content (v2smarrest)

Question: If a citizen posts political content online that would run counter to the government and its policies, what is the likelihood that citizen is arrested?

Responses:

- 0: Extremely likely.
- 1: Likely.
- 2: Unlikely.
- 3: Extremely unlikely.

Scale: Ordinal, converted to interval by the measurement model.

Countries: 160. Years: 2000-2021.

Citation: Mechkova et al. (2021).

4.8.25 State operation of print or electronic media (ccpcnc_govmed)

 $\label{eq:Question: Question} \textit{Question:} \ \text{How does the constitution address the state operation of print or electronic media?}$

- Responses:
 - 1: State must operate all media outlets.
 - 2: State can operate media outlets.
 - 3: State cannot operate media outlets.
 - 90: Left explicitly to non-constitutional law.
 - 96: Other.
 - 98: Not specified.

Countries: 154. Years: 1945-2020.

Citation: Elkins and Ginsburg (2022).

5 Background Factors

5.1 Electoral democracy index (v2x_polyarchy)

Question: To what extent is the ideal of electoral democracy in its fullest sense achieved?

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.2 Liberal democracy index (v2x_libdem)

Question: To what extent is the ideal of liberal democracy achieved?

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.3 Participatory democracy index (v2x partipdem)

Question: To what extent is the ideal of participatory democracy achieved?

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.4 Deliberative democracy index (v2x delibdem)

Question: To what extent is the ideal of deliberative democracy achieved?

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.5 Egalitarian democracy index (v2x egaldem)

Question: To what extent is the ideal of egalitarian democracy achieved?

Scale: Interval, from low to high (0-1).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.6 Regimes of the world (v2x_regime)

 $\label{eq:Question: Question: How can the political regime overall be classified considering the competitiveness of access to power (polyarchy) as well as liberal principles?$

Responses:

- 0: Closed autocracy: No multiparty elections for the chief executive or the legislature.
- 1: Electoral autocracy: De-jure multiparty elections for the chief executive and the legislature, but failing to achieve that elections are free and fair, or de-facto multiparty, or a minimum level of Dahl's institutional prerequisites of polyarchy as measured by V-Dem's Electoral Democracy Index.

- 2: Electoral democracy: De-facto free and fair multiparty elections and a minimum level of Dahl's institutional prerequisites for polyarchy as measured by V-Dem's Electoral Democracy Index, but either access to justice, or transparent law enforcement, or liberal principles of respect for personal liberties, rule of law, and judicial as well as legislative constraints on the executive not satisfied as measured by V-Dem's Liberal Component Index.
- 3: Liberal democracy: De-facto free and fair multiparty elections and a minimum level of Dahl's institutional prerequisites for polyarchy as measured by V-Dem's Electoral Democracy Index are guaranteed as well as access to justice, transparent law enforcement and the liberal principles of respect for personal liberties, rule of law, and judicial as well as legislative constraints on the executive satisfied as measured by V-Dem's Liberal Component Index.

Scale: Ordinal.
Countries: 160.
Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.7 Land area (e_area)

Question: What is the land area of a country?

Clarification: Country land area in square kilometers.

Countries: 157. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.8 Region (geographic) (e_regiongeo)

Question: In which geographic region is this country located?

Clarification: Regions are described based on geographic location.

Responses:

- 1: Western Europe.
- 2: Northern Europe.
- 3: Southern Europe.
- 4: Eastern Europe.
- 5: Northern Africa.
- 6: Western Africa.
- 7: Middle Africa.
- 8: Eastern Africa.
- 9: Southern Africa.
- 10: Western Asia.
- 11: Central Asia.
- 12: Eastern Asia.
- 13: South-Eastern Asia.
- 14: Southern Asia.
- 15: Oceania (including Australia and the Pacific).
- 16: North America.
- 17: Central America.
- 18: South America.
- 19: Caribbean (including Belize, Cuba, Haiti, Dominican Republic and Guyana).

Notes: For the countries coded only in the historical project or for which the UN does not have the code, the region is coded by V-Dem Data Manager in accordance with the position of the neighboring countries.

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.9 Region (politico-geographic) (e_regionpol)

Question: In which politico-geographic region is this country located?

Clarification: This is a tenfold politico-geographic classification of world regions, based on a mixture of two considerations: geographical proximity (with Cyprus, German Democratic Republic, and Mongolia being recoded from original coding) and demarcation by area specialists having contributed to a regional understanding of democratization. The categories are as follows:

Responses:

- 1: Eastern Europe and post Soviet Union (including Central Asia, Mongolia, and German Democratic Republic).
- 2: Latin America (including Cuba, Haiti, and the Dominican Republic).
- 3: North Africa and the Middle East (including Israel and Turkey, but excluding Cyprus).
- 4: Sub-Saharan Africa.
- 5: Western Europe and North America (including Australia, New Zealand, and Cyprus, but excluding German Democratic Republic).
- 6: Eastern Asia (including Japan, excluding Mongolia).
- 7: South-Eastern Asia.
- 8: Southern Asia.
- 9: The Pacific (excluding Australia and New Zealand).
- 10: The Caribbean (including Guyana and Suriname, but excluding Cuba, Haiti, and the Dominican Republic).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.10 Region (politico-geographic 6-category) (e_regionpol_6C)

Question: In which politico-geographic region is this country located?

Clarification: Regions are described as politico-geographic in the sense that they are based on geographical proximity as well as characteristics that contribute to regional understanding as identified by scholars in studies of democratization (e.g. post-Communist). This is a modification of e_regionpol above.

Responses:

- 1: Eastern Europe and Central Asia (including Mongolia and German Democratic Republic).
- 2: Latin America and the Caribbean.
- 3: The Middle East and North Africa (including Israel and Turkey, excluding Cyprus).
- 4: Sub-Saharan Africa.
- 5: Western Europe and North America (including Cyprus, Australia and New Zealand, but excluding German Democratic Republic).
- 6: Asia and Pacific (excluding Australia and New Zealand; see 5).

Countries: 160. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.11 Exports (e_cow_exports)

Question: What is the total value of a country's exports? Clarification: Total exports in 2014 US millions of dollars.

Countries: 152. Years: 1945-2014.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.12 Imports (e_cow_imports)

Question: What is the total value of a country's imports?

Clarification: Total imports in 2014 US millions of dollars.

Countries: 148. Years: 1945-2014.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.13 GDP (e_gdp)

Question: Point estimate from latent variable model of Gross Domestic Product Per Capita based on a number of sources.

Countries: 157. Years: 1945-2019.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.14 GDP per capita (e_gdppc)

Question: Point estimate from latent variable model of Gross Domestic Product Per Capita based on a number of sources.

Countries: 157. Years: 1945-2019.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.15 Inflation (e_miinflat)

Question: What is the annual inflation rate?

Countries: 140. Years: 1945-2010.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.16 Population (e_pop)

Question: Point estimate from latent variable model of Population based on a number of sources.

Countries: 157. Years: 1945-2019.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.17 Total fuel production per capita (e_total_fuel_income_pc)

Question: What is the real value of a country's petroleum, coal, and natural gas production?

Clarification: Real value of petroleum, coal, and natural gas produced per capita.

Countries: 147. Years: 1945-2006.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.18 Petroleum production per capita (e_total_oil_income_pc)

Question: What is the real value of a country's petroleum production?

Clarification: Real value of petroleum produced per capita.

Countries: 147. Years: 1945-2006.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.19 Total resources production (e_total_resources_income_pc)

Question: What is the real value of a country's petroleum, coal, natural gas, and metals production?

Clarification: Real value of petroleum, coal, natural gas, and metals produced per capita.

Countries: 147. Years: 1945-2006.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.20 Radios (e radio n)

Question: What is the number of radio sets?

Notes: Original source does not specify if the indicators considers total number of radio sets or

only radio sets in use.

Countries: 132. Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.21 Fertility rate (e_miferrat)

Question: What is the fertility rate?

Clarification: The fertility rate (i.e. total fertility rate, period total fertility rate, total period fertility rate) of a population is the mean number of children that would be born to a woman over her lifetime if (a) she were to experience the current age-specific fertility rates through her lifetime, and (b) she were to survive through the end of her reproductive life. It is obtained by adding single-year age-specific rates at a given time.

Countries: 156. Years: 1960-2020.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.22 Population total (e mipopula)

Question: What is the total population (in thousands)?

Notes: Missing data within a time-series is interpolated using linear interpolation.

Countries: 144. Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.23 Urbanization (e_miurbani)

Question: What is the urbanization rate?

Clarification: Ratio of Urban Population to Population.

Countries: 138. Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.24 Urban population (e_miurbpop)

Question: What is the total urban population?

Clarification: The population living in areas classified as urban according to the criteria of each area or country (United Nations, with reference to 1950-present).

Notes: Missing data within a time-series is interpolated using linear interpolation.

Countries: 138.

Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.25 Life expectancy, female (e_pefeliex)

Question: What is the life expectancy at birth among women?

Clarification: Life expectancy refers to expected longevity at birth based on current age-specific

mortality rates.

Notes: Missing data within a time-series is interpolated using linear interpolation.

Countries: 142. Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.26 Infant mortality rate (e_peinfmor)

Question: What is the infant mortality rate?

Clarification: Deaths of children during first year of life (per 1000 live births).

Notes: Missing data within a time-series is interpolated using linear interpolation.

Countries: 156. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.27 Life expectancy (e_pelifeex)

Question: What is the life expectancy?

Clarification: The average number of years a newborn child would live if current mortality patterns were to stay the same.

Notes: Missing data within a time-series is interpolated using linear interpolation.

Countries: 156. Years: 1945-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.28 Maternal mortality rate (e_pematmor)

Question: What is the maternal mortality rate?

Clarification: The number of maternal deaths divided by the number of live births in a given year, multiplied by 100000. Maternal death is defined as the death of a woman while pregnant or within 42 days after the termination of that pregnancy, regardless of the length and site of the pregnancy, from a cause related to or aggravated by the pregnancy.

Countries: 155. Years: 1945-2013.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.29 Civil war (e_civil_war)

Question: Was there a civil war?

Clarification: Civil war — at least one intra-state war with at least 1,000 battle deaths for each country-year.

Responses:

0: No.

1: Yes.

Countries: 147.

Years: 1945-2006.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.30 Armed conflict, international (e_miinteco)

Question: Did the country participate in an international armed conflict?

Clarification: Coded 1 if the country participated in an international armed conflict in a given year, 0 otherwise. The original source codebook states that no war is coded as 0 and war is coded as 1. However, the data contains only 1's along with missing data (no 0's). Following the authors' instructions (personal communication), we re-code missing observations as non-conflict (0) for countries where at least one year in the original times series (which runs from 1500 until present) was coded as 1.

Countries: 151. Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.31 Armed conflict, internal (e miinterc)

Question: Did the country experience an internal armed conflict?

Clarification: Coded 1 if the country suffered in an internal armed conflict in a given year, 0 otherwise. The original source codebook states that no war is coded as 0 and war is coded as 1. However, the data contains only 1's along with missing data (no 0's). Following the authors' instructions (personal communication), we re-code missing observations as non-conflict (0) for countries where at least one year in the original times series (which runs from 1500 until present) was coded as 1.

Countries: 151. Years: 1945-2000.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

5.32 Coups d'etat (e_pt_coup)

Question: Did a coup d'etat occur?

Clarification: Coups d'etat are defined as "overt attempts by the military or other elites within the state apparatus to unseat the sitting head of state using unconstitutional means(...)there is no minimal death threshold for defining a coup. A coup attempt is defined as successful if the coup perpetrators seize and hold power for at least seven days."

Responses:

- 0: No coup attempt occurred.
- 1: Unssuccessful coup attempt occurred.
- 2: Successful coup attempt occurred.

Notes: Where the number of observations per country—year is more than one, the maximum value was taken to indicate whether there was a coup or not.

Countries: 157. Years: 1950-2021.

Citation: See V-Dem Codebook (Coppedge et al., 2023).

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7 Appendix: Instructions and Key Definitions for Coders

Thank you for agreeing to take part in this expert survey. We will ask you 27 questions mainly related to the education system of your country of expertise. For each question we will ask you to provide annual responses for the years between 1945 and 2021. We will also ask you to rate how certain you are about each answer.

- We are interested in <u>formal public or publicly-funded education</u>: that is, schools that are controlled, managed and funded by the public sector (a relevant national / sub-national / local public authority), as well as schools that are partially funded or subsidized by the public sector but operated by a private body (for example, schools that charge tuition but also receive some public funds or subsidies). We are not interested in schools fully controlled, managed and funded by a private body (for example, a non-governmental organization, a religious body, a special interest group, a foundation, a business enterprise). This means, for example, that religious schools will be included in our definition only if they are operated by a public authority or publicly-funded or subsidized by the public sector.
- Unless clearly stated, our questions relate to formal education at the primary and secondary level, not distinguishing between the two levels. If there are substantive differences between the primary and secondary education levels, please provide the response that is most accurate for the majority of students.
- Some questions distinguish between primary and secondary education. In cases, where upper secondary education is specialized, please think about lower secondary education.¹
- We are interested in changes over time at the aggregate country level. Please make sure your answers reflect educational reforms or changes in teaching practices over time.
- We intend for all questions to concern the <u>majority</u> or <u>plurality</u> of public or <u>publicly</u> funded schools, teachers and <u>pupils</u> in a given country and year.

 For each question, please try to think of what would be expected in the most typical school.
- In cases where sub-national differences exist due to <u>decentralized</u> education systems, please consider policies and practices in the most populous sub-national units.
- Many of our questions pertain to the <u>official curriculum</u>. The official curriculum (set by national / sub-national / local authorities / school administrations) may include: textbooks, topics covered in subject syllabi, teaching materials, as well as the list of subjects that are to be taught by schools and the amount of time that should be devoted to each subject.

At the end of the survey, you will be asked to code a set of "vignettes" for the questions that you coded. The vignettes describe short hypothetical country scenarios. Each is followed by one survey question that prompts you to code the vignette just as you would a real country, based only on the information provided by the vignette. The vignettes help us to ensure cross-country comparability and over time reliability in our data and contributes greatly to the project as a whole. The vignettes will appear in a separate section at the end of the survey. We would be grateful if you take the time to code these as well.

¹In defining different education levels, we use the ISCED classification adopted by UNESCO, the International Standard Classification of Education (ISCED) 2011: primary education (ISCED level 1); secondary education (lower secondary ISCED level 2 and upper secondary ISCED level 3); tertiary education (ISCED level 6 and higher, that is, bachelor's, master's, doctoral or equivalent levels). We also define: post-secondary non-tertiary education (ISCED level 4); non-university level tertiary education (ISCED level 5, short-cycle tertiary education).