The Impact of Civic Education on Political Attitudes and Social Capital

Causal Evidence from Post-World War II Germany

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Motivation

Should the government enforce that civic education is taught as a separate subject in schools?

- **Benefits:** Social returns: promotion of stable and well functioning democracy
- **Potential costs:** Risk of a direct political influence in favor of the ruling party via the class room (Friedman 1962), opportunity costs (leisure, teaching other subject)

Research question

Is there a causal effect of mandatory civic education (taught in secondary school) on civic capital and political attitudes later in life?

This Paper

Quasi-experimental design

Exploit unique (West-) German setting with substantial post-war variation across German states and school types due to school reforms

Treatment

Number of hours students are exposed to civic education in school

Data

Novel database on civic education + German Socio-Economic Panel (GSOEP) $(N \approx 30.000)$

Related Literature

Political science

- Political participation depends on resources, psychological engagement with politics, and access to recruitment networks (Verba, Schlozman, and Brady 1995)

Political economy

- Education affects skills and knowledge ➞ reduces costs of understanding and participating in politics (Dee 2004; Bömmel, Gebel, Heineck 2020)

Education and fake news

- Education presented as important factor that can decrease dissemination of fake news (Rampersad & Althiyabi 2020; Allcot & Gentzkow 2017)

Economics of education

- More recent contributions also focus on non-academic outcomes of school reforms such as personality traits (e.g., Almlund et al. (2011) and soft skills (e.g., Koch, Nafziger, and Nielsen 2015), or religious attitudes (Arold, Woessmann, and Zierow 2022)

Novel database on civic education

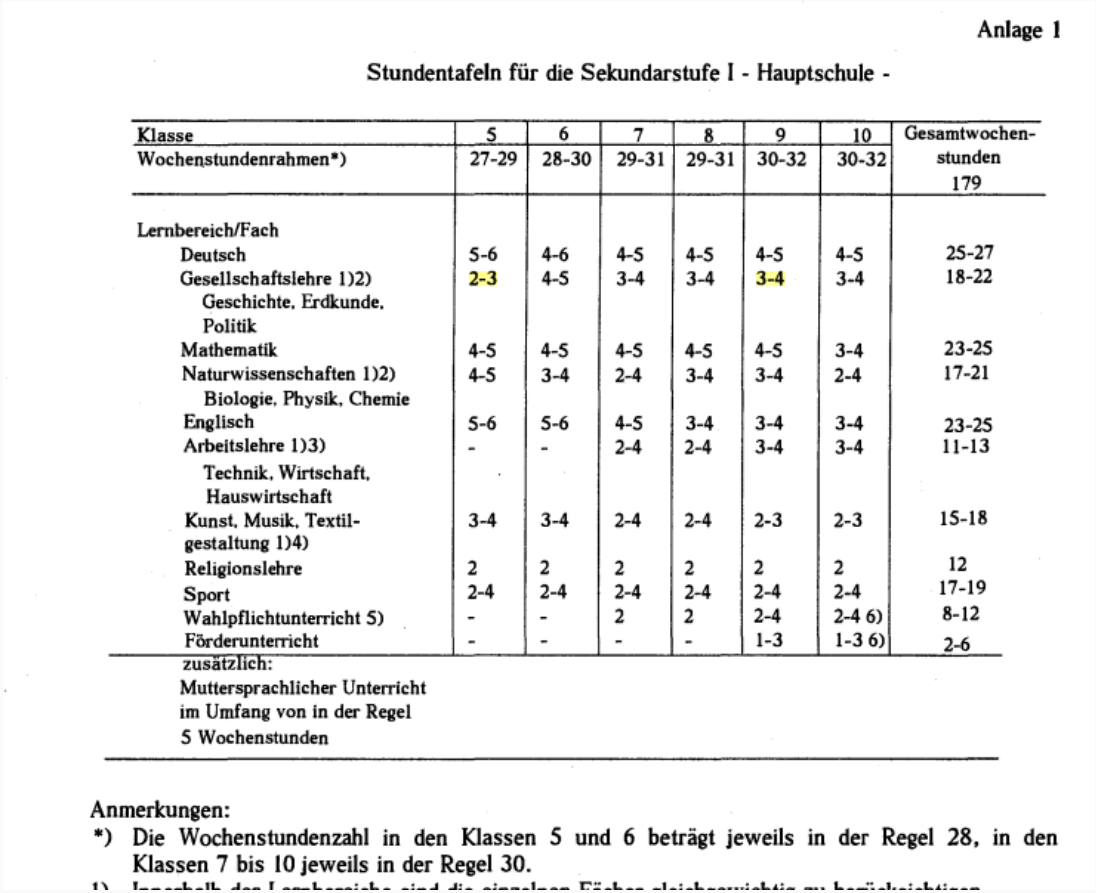
Coding of all available historical legal records documenting changes in the curricula

Includes …

- All major types of schools in all secondary school grades (typically 5 to 10)
- In West-German states after World War II

Exposure measure for civic education

- Compulsory hours per week of civic education students have received in each cohort
- Longitudinal data set on the intensive and extensive margin of civic education



Anlage 1

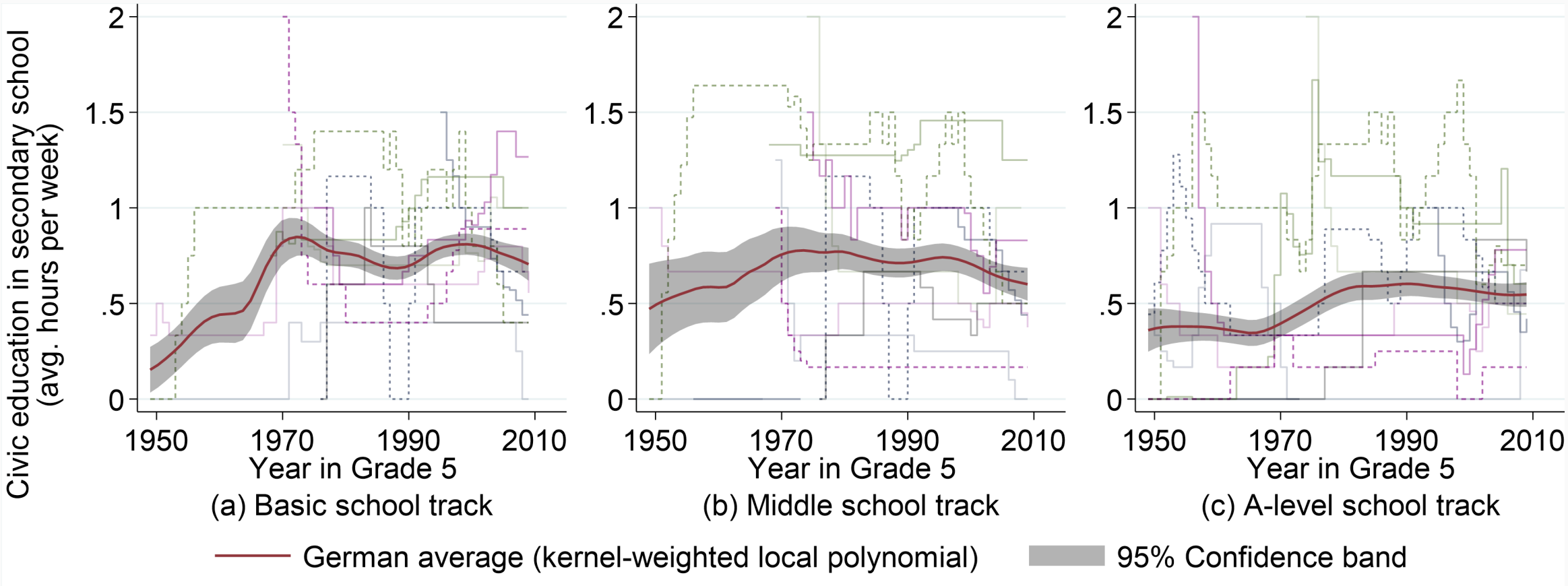
Stundentafeln für die Sekundarstufe I - Hauptschule -

Klasse	5	6	7	8	9	10	Gesamtwochen-stunden
Wochenstundenrahmen*)	27-29	28-30	29-31	29-31	30-32	30-32	179
Lernbereich/Fach							
Deutsch	5-6	4-6	4-5	4-5	4-5	4-5	25-27
Gesellschaftslehre 1)2)	2-3	4-5	3-4	3-4	3-4	3-4	18-22
Geschichte, Erdkunde, Politik							
Mathematik	4-5	4-5	4-5	4-5	4-5	3-4	23-25
Naturwissenschaften 1)2)	4-5	3-4	2-4	3-4	3-4	2-4	17-21
Biologie, Physik, Chemie							
Englisch	5-6	5-6	4-5	3-4	3-4	3-4	23-25
Arbeitslehre 1)3)	-	-	2-4	2-4	3-4	3-4	11-13
Technik, Wirtschaft, Hauswirtschaft							
Kunst, Musik, Textil-gestaltung 1)4)	3-4	3-4	2-4	2-4	2-3	2-3	15-18
Religionslehre	2	2	2	2	2	2	12
Sport	2-4	2-4	2-4	2-4	2-4	2-4	17-19
Wahlpflichtunterricht 5)	-	-	2	2	2-4	2-4 6)	8-12
Förderunterricht	-	-	-	-	1-3	1-3 6)	2-6
zusätzlich: Muttersprachlicher Unterricht im Umfang von in der Regel 5 Wochenstunden							

Anmerkungen:

*) Die Wochenstundenzahl in den Klassen 5 und 6 beträgt jeweils in der Regel 28, in den Klassen 7 bis 10 jeweils in der Regel 30.

Large variation in the extend of civic education over birth cohorts and school types



Note: Red line indicates the conditional average across all (equally) weighted West German states estimated by a local polynomial regression with a 95% confidence band.
Data source: Own data on civic education.

Micro Data

SOEP

- Match the civic education records with individual-level data from the German Socio-Economic Panel (GSOEP).
- Individuals who entered primary school between 1949 and 2014
- We include only West German birth cohorts

Data link between exposure to civic education and individuals

- Use of the best information available on state of schooling, school type, and school entry year
- Worst case: use birthdate information and state-time specific school entry cutoff dates

Our Outcomes

Political interest

“Generally speaking, how much are you interested in politics? Very interested, moderately interested, not much interested, or completely disinterested?” (1 to 4)

Satisfaction with democracy

“How satisfied are you today with democracy as it exists in Germany?” (0 to 10)

Political attitude

“In politics people often talk about "left" and "right" to mark different political attitudes. If you think about your own political attitude: Where would you place yourself?” (-5 left to 5 right)

Estimand of Interest

$$\beta^{ACR} = Y_{igt}(d) - Y_{igt}(d')$$

β^{ACR}: average causal response (ACR) for change in civic education from level d' to d

Identifying assumptions

- Strong exogeneity
- Common trends in untreated potential outcomes, $Y_{igt}(d')$
- Independent groups

Heterogeneity

- Constant-effects TWFE estimate gives a weighted average of cohort-group specific effects
- Estimating a constant-effect TWFE model if true β^{ACR} is heterogeneous causes a problem (Wooldridge, 2021)
- **Solution**: Heterogeneous-effects “extended” TWFE model (eTWFE)

Empirical Model

Heterogeneous-effects “extended” TWFE model (eTWFE)

$$y_{igst} = \alpha + f(\mathbf{x}_{gt}, \dots)d_{gt} + \delta' \mathbf{x}_{igt} + \gamma' \mathbf{x}_{gt} + \mu_{gs} + \lambda_t + \lambda_t \times \mu_s + \epsilon_{igst}$$

- i: individual response, g: state x school type, s: state, t: cohort, d: continous measure of civic education, y: outcome of interest, x: individual and group level controls (gender, age, parental education, party in power)
- $f(.)$ varies by: cohort (in decades), age (quartic trend), state x school type
- Intuition: estimate $f(.)$ with interaction terms & compute β^{ACR}
- If heterogeneity is modelled correctly: eTWFE is unbiased

Preliminary Results

	Political Interest			Satisfaction with Democracy			Political Attitude (left(-), right(+))		
	Full Sample	By Gender		Full Sample	By Gender		Full Sample	By Gender	
		Female	Male		Female	Male		Female	Male
Accounting for heterog. effects (eTWFE estimated by OLS)									
Civic education	**-0.097**	**-0.144****	**-0.059**	**-0.194**	**0.692****	**-1.322*****	**-0.204**	**-0.490*****	**0.440***
	(0.067)	**(0.063)**	**(0.141)**	**(0.302)**	**(0.303)**	**(0.268)**	**(0.131)**	**(0.136)**	**(0.230)**
R squared	0.26	0.23	0.25	0.09	0.11	0.12	0.07	0.09	0.08
N	190694	98294	92391	29436	15368	14034	30369	15728	14611
Descriptives									
mean	2.31	2.15	2.49	5.95	5.94	5.96	-0.34	-0.50	-0.17
sd	0.82	0.76	0.84	2.32	2.25	2.39	1.61	1.52	1.69
min	1	1	1	0	0	0	-5	-5	-5
max	4	4	4	10	10	10	5	5	5
Assuming constant treatment effects (cTWFE estimated by OLS)									
Civic education	-0.041	-0.035	-0.063	0.188	0.270	0.006	0.050	-0.017	0.157
	(0.041)	(0.058)	(0.048)	(0.125)	(0.236)	(0.114)	(0.059)	(0.055)	(0.094)
Weights (Chaisemartin and D'Haultfoeuille, 2020)									
Share of negative weights	48%	48%	47%	48%	47%	47%	48%	50%	47%
∑(neg. weights) / ∑(pos. weights)	0.66	0.67	0.66	0.66	0.68	0.66	0.66	0.68	0.65

Outlook and Conlcusion

- Strong gender differences in the effect of civic education, especially on satisfaction with democracy and political left-right attitude

Next steps

- What drives gender & cohort differences?
- Look at further outcomes: voting behavior, party identification, test data on civic knowledge (from GLES)

Get in contact!

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