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Democracy and the Politicization of Education

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DEMOCRACY AND THE POLITICIZATION OF EDUCATION

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Challenging the conventional wisdom that the spread of democracy was a leading driver of the expansion of primary schooling, recent studies show that democratization in fact did not lead to an average increase in primary school enrollment rates. One reason for this null effect is that there was already considerable provision of primary education before democratization. Still, it is possible that the spread of democracy *did* impact other aspects of education systems, such as the content of education and the extent to which teaching jobs are politicized. Studying this possibility cross-nationally has been infeasible due to data limitations. To address this gap, we take advantage of an original dataset covering 160 countries from 1945 to 2021 that contains information about these aspects of education. We document that transitions to democracy tend to be preceded by a decline in the politicization of both education content and teaching jobs. However, soon after democratization occurs, this decline usually halts. Counterfactual estimates suggest that democratization roughly halves the degree to which teacher hiring and firing decisions are politicized, but has a smaller impact on the content of education. The empirical patterns that we uncover have important implications for future research.

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The relationship between democracy and education has been of enduring interest to social scientists. Until recently, the conventional wisdom was that democratization played a leading role in increasing primary school enrollment rates and primary education expenditures.⁴ Most of the empirical studies supporting this view, however, were produced before the causal inference revolution and had two methodological limitations: they overlooked the fact that countries with historically higher enrollment and expenditure levels were more likely to eventually become democratic, and/or they overlooked the fact that both democracies and non-democracies experienced similar increases in enrollment rates and expenditures after the 1950s. In a recent study that uses more modern causal inference methods to overcome these limitations, Paglayan (2021) concludes that democratization played, at best, a minor role in explaining the global increase in primary school enrollment rates and expenditures. Using similar methods but a different dataset of enrollment rates, Aghion et al. (2019) also conclude that the cross-national positive correlation between democracy and enrollment reflects a spurious relationship. This evidence is supplemented by recent studies that rely on subnational data from Austria, Italy, and Sweden and also find that municipalities and provinces with more extensive suffrage rights in the nineteenth century did *not* experience larger increases in primary education expenditures (Cvreck and Jakicek 2019; Andersson and Berger 2019; Cappelli 2016). Collectively, recent studies converge on the view that the expansion of primary education systems was an elite-driven process and that democratization did little to aid this expansion.

This recent evidence notwithstanding, it is possible that democratization brought about important changes in other aspects of education systems, such as the content of education and the characteristics of teachers. It is well-documented that a key goal of mass education in non-democratic regimes is to indoctrinate children in order to form patriotic, loyal, and obedient future citizens (Darden and Grzymala-Busse 2006; Cantoni et al. 2017; Testa 2018; Paglayan 2022a). In turn, because the effectiveness of these indoctrination efforts usually depends on teachers' willingness to implement the prescribed curriculum, regimes that want to use schools to indoctrinate children often use political criteria to make decisions about teacher hiring and dismissal. Do the education policies and practices of non-democratic regimes persist or change after the emergence of democracy?

We conduct the first quantitative study of how the content of education and the politicization of teaching compares in democratic versus non-democratic regimes. These are substantively important questions with theoretically non-obvious answers. For example, with respect to the content of education, it is possible that education policymakers in democratic countries care as much as their counterparts in non-democracies about instilling specific political values among future citizens, and only differ in the content of their preferred values. Alternatively, perhaps democracies are less insistent on having students internalize any particular set of values, and are

⁴ For literature reviews, see Busemeyer and Trampusch (2011), Gift and Wibbels (2014), and Paglayan (2022b).

instead committed to promoting debate and critical thinking skills that enable students autonomously to choose their own values, even if this could pose a risk to political stability. Similarly, with respect to teaching jobs, it could be that a new democratic government is highly interested in distributing jobs based on political criteria, for instance because this may help win elections and implement the new government's preferred curriculum. Alternatively, it could be that democratic regimes are more responsive to pressure from citizens, business groups, and international organizations to make the teaching career more meritocratic and less politicized.⁵

A key reason why we do not know how the content of education or the politicization of teaching compares in democracies relative to non-democracies is the absence of comparable data on these aspects of education systems. We overcome this limitation using an original dataset that covers 160 countries from 1945 to 2021 (Neundorf et.al. 2023a). This dataset, described in the next section, enables us to conduct the first systematic quantitative analysis of the relationship between democracy, the content of education, and the politicization of teaching around the world.

Our analysis uncovers a set of empirical patterns that introduce important puzzles for future research in comparative politics and the social sciences. We find that transitions to democracy are often *preceded by* a gradual, sustained decline in the politicization of both education content and the teaching career. However, as soon as democracy emerges, this decline *ceases* despite there still being considerable room for further reductions. After documenting these descriptive patterns, we follow Liu, Wang, and Xu (2022) to estimate the average treatment effect of democratization among countries that transitioned to democracy after 1945. Our estimates suggest that democratization reduces but does not eliminate the politicization of education. Together with recent cross-national evidence suggesting that democratization did not lead to the expansion of primary schooling (Paglayan 2021) or to improvements in student math, science, and reading skills (Dahlum and Knutsen 2017), our findings suggest that the characteristics of education systems created by autocratic regimes have often endured even after the collapse of these regimes.

⁵ We do not engage in the normative question of whether it is good or bad for education systems to promote a specific set of political values, hire teachers who share those values, etc. This is an important question for future research.

DATA

Democracy. Most studies of the relationship between democracy and education use Polity scores to identify democratic regimes. To facilitate comparisons with past studies, our main analysis follows the same approach. Polity scores, which can vary from -10 to 10, reflect whether there are open and competitive elections and constraints on executive power. We construct a binary measure of democracy following the convention that a country is considered democratic if its Polity score is between 6 and 10. In the Online Appendix we show that our conclusions are robust to three alternative sources and measures of democracy: (1) Boix, Miller, and Rosato's (2012) measure, which counts as democratic any country where there are competitive elections and more than 50% of adult males can vote; (2) a measure of democracy, including both electoral and liberal democracies, using the $v2x_regime$ variable of the Varieties of Democracy dataset; (3) a measure of *liberal* democracy based on the same source.

Content of education and politicization of the teaching career. We measure these aspects of education systems across 160 countries from 1945 to 2021 using the Varieties of Political Indoctrination in Education and the Media (V-Indoc) (Neundorf et.al. 2023a).⁶ The V-Indoc dataset draws on 760 country experts (an average of 4.75 experts per country), each of whom was vetted specifically for their expertise about a given country's history of education. For any given country-year-question, the responses of different experts were aggregated into a single value by taking into consideration each expert's self-confidence in their own response. Box 1 lists the set of questions that experts answered about the content of education and the politicization of teaching, along with the name of the variable associated with each question. These are our dependent variables.

Regarding the content of education, V-Indoc codes whether primary schools *attempt to teach political values*, for instance by having a mandatory subject that focuses on this task, encouraging student participation in extracurricular political activities, or using history lessons to promote a specific societal model or political ideology. It also characterizes the *content of the values taught*, specifically the degree to which schools promote patriotic and/or democratic values. Finally, it measures whether *students have room to question* the values taught by schools. Specifically, it measures whether schools endorse a single, unquestionable historical narrative, or whether they expose students to alternative interpretations of historical events and give students opportunities to develop critical thinking skills.

Regarding teachers, V-Indoc measures whether teacher hiring and/or firing decisions are based on teachers' political views, whether teachers have autonomy to deviate from the official

⁶ The V-Indoc dataset includes missing values for countries created after the dissolution of the U.S.S.R. and Yugoslavia in years preceding the creation of these countries. In robustness tests, we show that our results hold when we impute these missing values with data from Russia and Serbia.

curriculum, what the educational qualifications are for aspiring teachers, and whether politically autonomous teacher unions exist.

Box 1. List of dependent variables

Content of Education

Conte	nt of Education					
Attem	pt to teach political values:					
1.	Are primary school students required to study at least one subject that predominantly					
	focuses on teaching political values? (v2edpoledprim_osp)					
2.	How often does the history curriculum promote a specific societal model or ideology?					
	(v2edideol_osp)					
3.	Do schools promote involvement in extracurricular civic and/or political activities?					
	(v2edscextracurr_osp)					
Conte	nt of values taught (patriotism and/or democracy):					
4.	How often does the language curriculum promote patriotism? (v2edpatriot_osp)					
	How often are patriotic symbols or dates celebrated in schools? (v2edscpatriotcb_osp)					
6.	To what extent does the history curriculum promote a specific societal model in which					
	democracy exists? (v2edideolch_rec_osp)					
Room	for questioning the values taught:					
7.	When historical events are taught, to what extent are students exposed to diverse views					
	and/or interpretations of these events? (v2edplural_osp)					
8.	To what extent do students have opportunities to discuss and critically engage with the					
	content they are taught in history classes? (v2edcritical_osp)					
Teach	ing Career					
1.	To what extent are hiring decisions for teachers based on their political views and/or					
	political behavior and/or moral character? (v2edtehire_osp)					
2.	0					
	political behavior and/or moral character? (v2edtefire_osp)					
3.	What are the de facto education requirements to become a primary school teacher?					
	(v2edtequal_osp)					
4.	Do history teachers have autonomy to deviate from the content of the official					
	curriculum in the classroom? (v2edteautonomy_osp)					
5.	Do officially recognized teacher unions exist in this country? (v2edteunion_osp)					
6.	Are officially recognized teacher unions independent from political authorities?					
	(v2edteunionindp_osp)					

An important potential concern is that, in principle, experts' assessments of the characteristics of education systems could reflect their views about the political regime in place rather than the actual characteristics of those systems. For example, if experts believed that autocracies are less likely to promote critical thinking than democracies, then the data would lead us to conclude that democratization leads to sharp increases in students' opportunities for critical thinking, and we would be unable to know whether this is in fact true or whether the findings are driven by experts' political biases.

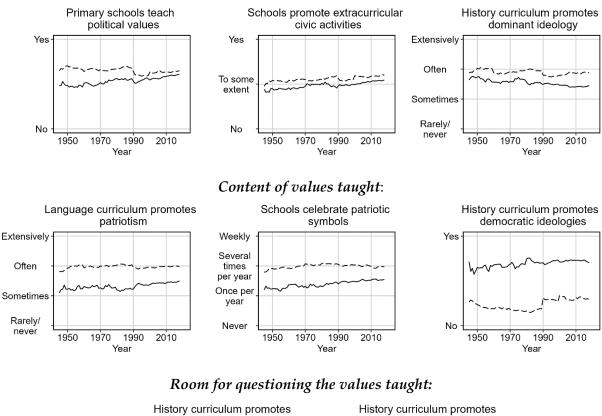
Two validation exercises provide evidence that this is not a concern with the V-Indoc dataset. First, Neundorf et.al. (2023b) compare the V-Indoc dataset with other existing datasets that gathered similar information about education systems, such as Bromley, Meyer, and Ramirez's (2011) analysis of school textbooks in 82 countries from 1970 to 2008, and find a strong correlation between V-Indoc variables and similar variables in other datasets. Second, for another project, one of the authors independently collected detailed information for a small subset of countries about the curriculum and teacher policies in place from 1870 to 2010 using primary sources such as education laws, education regulations, national decrees, national curriculum plans, official documents from ministries of education, etc. This type of data collection is extremely time-consuming and expensive and is not feasible at a large scale, but for the subset of countries covered, the correlation with V-Indoc for most overlapping variables was above 0.7, providing strong evidence that V-Indoc does capture the characteristics of education systems.

By way of introducing the V-Indoc dataset, Figure 1 compares average values in democracies (solid) and non-democracies (dashed) for our dependent variables from 1945 to 2018.7 Here we summarize the main descriptive patterns that emerge from the data, focusing on the big picture. Beginning with the content of education (Panel A), we note that the vast majority of democracies and autocracies today make similar efforts to instill political values by having a mandatory subject in primary schools that focuses on this and by promoting student participation in extracurricular political activities to a similar extent, leaving behind a time when these practices were more common in autocracies than in democracies. On the other hand, the practice of using the history curriculum to teach a dominant ideology is somewhat less common in democracies than autocracies today, and has been declining in the former over time. Moreover, the content of the values promoted by schools differ across regimes: first, it is more common for history lessons in democratic regimes than in autocratic ones to promote democratic principles and institutions; and second, while both promote patriotism through the language curriculum (e.g., by using stories with patriotic content to teach reading skills) and through school celebrations of patriotic symbols (e.g., flag-raising ceremonies, broadcasting or singing the national anthem, etc.), these practices are more frequent in autocracies than in democracies. Finally, the degree to which students are exposed to multiple interpretations of historical events and the degree to which history lessons foster critical thinking is greater in democracies than in autocracies. However, the teaching of diverse perspectives and critical thinking are not the norm in history lessons: even in democracies, the average values of these respective variables, which can range from 0 (low) to 3 (high), are below the 1.5 midpoint.

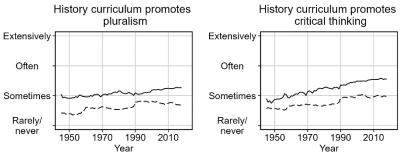
⁷ V-Indoc variables are constructed using V-Dem's measurement model (Coppedge at. 2023), which aggregates expert ratings to generate standardized scores for each variable. The dataset also includes an accompanying variable that translates these scores back to their original ordinal scales. We use these original scale scores in our analyses as they are almost perfectly correlated with their standardized score counterparts (typically 0.98 or higher) and are easier to interpret. Our results are robust to using the standardized scores.

Figure 1. Content of Education and Politicization of the Teaching Career in Democracies and Non-Democracies, 1945-2018

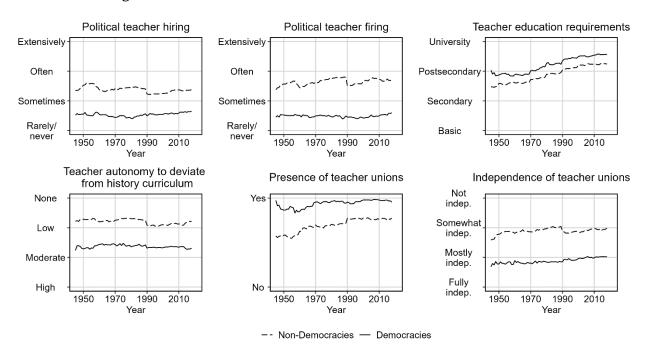
Panel A: Content of Education



Attempt to teach political values:



-- Non-Democracies - Democracies



Panel B: Teaching Career

The most consistent and largest differences between democracies and autocracies appear not in the content of education but in the politicization of the teaching career (Panel B). While the educational qualifications required to become a teacher are only somewhat higher in democracies than in autocracies, teachers in democracies are considerably less likely to be hired or fired on the basis of their political characteristics than teachers in autocracies, have considerably more autonomy to deviate from the official history curriculum, and have considerably greater ability to form unions that can operate in a politically autonomous fashion.

The cross-sectional comparisons shown in Figure 1 give us new descriptive information but tell us nothing about the effect of democratization on the content of education or the politicization of the teaching career. Estimating this effect is the task of the remainder of this study.

CONTENT OF EDUCATION AND TEACHING CAREER BEFORE AND AFTER DEMOCRATIZATION

We begin in this section by examining how our dependent variables change *within* countries that democratize (treated countries) before and after democratization. In the next section, we use data from countries that remain non-democratic (control countries) to estimate counterfactual trends for treated countries and ATT (average treatment on the treated) effects.

We focus first on the variables that characterize the content of education: In Panel A of Figure 2 we graph their average trend among countries that transitioned to democracy between 1945 and 2018 in the twenty years before and the twenty years after a country's first transition to democracy. In Panel B we do the same for variables that characterize the teaching career. In line

with Paglayan's (2021) approach and following the methodological advice in Liu, Wang, and Xu (2022), we focus the analysis on the *first* democratization that took place within a country during the period of study because visual inspection of the data and formal diagnostic tests suggest that later transitions to democracy are endogenous to the education provided by previous democracies.⁸

Consistently across nearly all the variables we analyze, the first clear pattern that emerges is a *decline during the two decades preceding transitions to democracy* in the politicization of education. Panel A of Figure 2 shows that, before democracy emerges, there is a gradual decline in the degree to which primary schools have a mandatory subject focused on teaching political values, schools promote student participation in extracurricular political activities, history lessons promote a specific ideology, language lessons promote patriotism, and schools celebrate patriotic symbols, and a gradual increase in the degree to which history lessons present multiple perspectives and encourage critical thinking. Similarly, Panel B shows that democratization is preceded by a gradual decline in the politicization of teacher hiring and dismissal decisions, and an increase in the educational qualifications of teachers. In the Online Appendix we disaggregate these trends by geographic region and show that the sharpest declines in the politicization of education during the decades preceding democratization are observed in former Soviet Union countries (Figures A2 and A3). Still, even when we compute average trends without these countries (as we do in the dashed lines in Figure 2), we still observe consistent declines in the politicization of education in the decades *preceding* democratization.

Second, about two-thirds of the dependent variables also experience immediate change when democratization emerges (at *t*=0). The biggest changes at *t*=0 occur in the extent to which history lessons promote a societal model in which democracy exists, as well as in variables that measure the politicization of teaching: as soon as democracy emerges, there are notable declines in the extent to which teacher hiring and firing decisions are based on teachers' political values, as well as increases in teachers' and unions' autonomy.

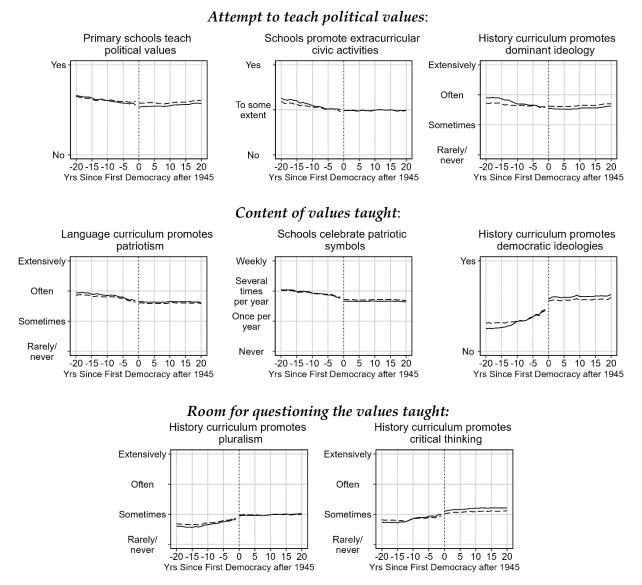
The third clear pattern that emerges from Figure 2 is that the politicization of education *ceases to decline after democracy emerges*. For example, the prevalence of a mandatory subject focused on teaching political values to primary school students, the extent to which language lessons promote patriotism, the frequency with which schools celebrate patriotic symbols, the extent to which history lessons expose students to diverse viewpoints, and the politicization in teacher hiring and firing, all of which exhibit a downward trend during the period preceding democratization, all cease to decline after democracy emerges. There is one exception to this

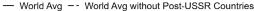
⁸ Specifically, we find evidence of carryover effects when we analyze *all* transitions to democracy within a country (i.e., when we allow the treatment status to switch on and off, we observe that past democracies continue to have effects even after their demise). We therefore estimate the effect of *ever* having transitioned to democracy by restricting our analyses to the cumulative effect of a country's first transition to democracy during the period of analysis.

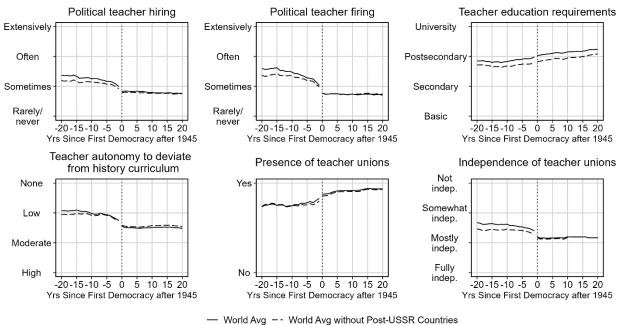
pattern: the education qualifications required to become a teacher continue to increase after the transition to democracy, but they do so at a similar pace as in the decades preceding democratization, not faster.

Figure 2. Content of Education and Politicization of the Teaching Career 20 Years Before and 20 Years after Democratization

Panel A: Content of Education







Panel B: Teaching Career

— World Avg —- World Avg Without Post-USSR Countries

In the Online Appendix we show that these patterns are also present when we restrict the analysis to transitions to *liberal* democracy (Figure A4) and when we restrict our sample to observations coded by at least three education experts (Figures A6-A7). We also show that the similarity of the patterns across multiple dependent variables is not driven by multicollinearity between variables; the average pairwise correlation between variables is 0.11 (Table A1).

EFFECT OF DEMOCRATIZATION

While we might be tempted to conclude from Figure 2 that democratization does not lead to a decline in the politicization of education, as suggested by the flat trend in our dependent variables after t=0, that analysis does not enable us to say anything about the effects of democratization. It is possible that, absent democratization, the trends would have been different than what we observe—a possibility we explore in this section. In fact, the estimates we present in this section suggest that democratization does lead to changes in the content of education and the characteristics of the teaching career.

To estimate the effect of democratization, we follow Liu, Wang, and Xu (2022) and estimate counterfactual outcomes for democratizing (treated) countries using data from countries that remain non-democratic (control). Conventional difference-in-differences (fixed effects) estimators have been shown to produce biased estimates when the adoption of the treatment is staggered and the effects of the treatment are heterogeneous across early and late adopters of the treatment (Goodman-Bacon 2021). The bias emerges when early adopters are used as control units for late adopters. To avoid this problem, we use the matrix completion (MC) estimator proposed by Liu, Wang, and Xu (2022), which estimates counterfactual outcomes using only data

from never-treated countries.⁹ For each dependent variable, we use the MC approach to estimate the effect of democratization on our dependent variables (Y_t) for 8 different measures of the timing of democratization (D_t).¹⁰

Another key advantage of the MC estimation strategy is that it allows us to test for the presence of anticipation effects (e.g., a correlation between outcomes preceding t=0 and treatment status at t=0), which would lead us to underestimate the effect of democratization. This is a possibility we need to take seriously in our context given the descriptive patterns discussed in the previous section. Specifically, for each Y_t and D_t combination, we conduct placebo tests which assume that the treatment starts earlier than its actual onset and recompute the counterfactual estimator. If the identifying assumption of no anticipation effects holds, we should observe that the recomputed ATT effects in the periods preceding treatment onset are still zero.¹¹

We present a summary of our findings in Figures 3 and 4. Figure 3 shows, for our measures of the content of education (Panel A) and the teaching career (Panel B), the estimated ATT effects of democratization along with 95 percent confidence intervals,¹² using as the treatment the first transition to democracy since 1945 according to Polity. The y-axis scale is chosen to show +/- 1 standard deviation of each dependent variable. Figure 4 shows the estimated ATT effect within 10 years of democratization for each Y_t and D_t combination, which helps us assess the robustness of our findings across different measures of the timing of democratization. In addition, in this figure we use green confidence intervals to indicate that the model passes the placebo test and red to indicate that it does not. In the Online Appendix, we also show that our main conclusions hold when we restrict the analysis to observations coded by at least three experts, exclude former U.S.S.R., countries, or impute pre-independence values for countries created after the dissolution of the U.S.S.R., Czechoslovakia, and Yugoslavia.

How does democratization affect the content of education? The evidence in Figures 3 and 4 can be summarized as follows. First, democratization generally does not affect the likelihood that primary schools will have a mandatory subject focused on teaching political values, but it does reduce schools' propensity to promote extracurricular political activities and their propensity to instill a specific ideology through the history curriculum. Second, conditional on history lessons continuing to promote a specific ideology after democratization, transitions to democracy increase the likelihood that the preferred ideology is one that emphasizes the norms and

⁹ Liu, Wang, and Xu (2022) also propose the interactive fixed effects counterfactual (IFEct) estimator, of which the two-way fixed effects estimator is a specific case (when the number of factors *r* equals zero). To select between models, we estimated multiple IFEct and MC models, varying the number of factors (for IFEct models) and the value of lambda (from MC models). Across the board, matrix completion estimators with lambdas close to zero yield the lowest mean squared prediction error, and hence we opt for this estimator.

¹⁰ See Table A2 for a list of definitions of treatment onset.

¹¹ Our placebo period goes from t=-3 to t=-1.

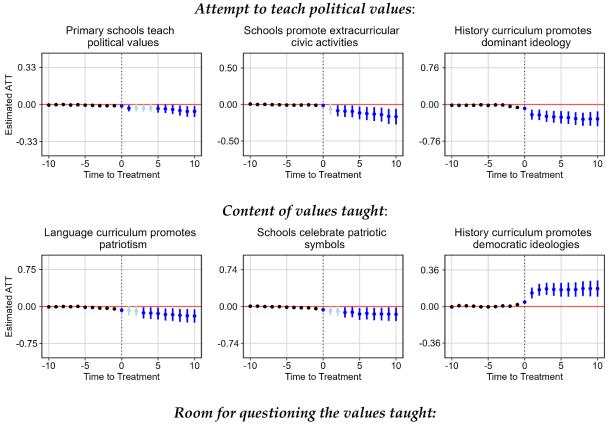
¹² Standard errors are constructed based on 1,000 iterations of nonparametric bootstrap.

institutions of democracy. Third, democratization tends to lead to a reduction in schools' efforts to promote patriotic values. Fourth, democratization leads to an increase in the degree to which students are exposed to multiple interpretations of historical events and the degree to which schools promote critical thinking skills when teaching history.

How does democratization affect the politicization of the teaching career? We find that democratization leads to reductions in the politicization of teacher hiring and firing decisions, increases teachers' autonomy, increases teachers' ability to establish politically independent unions, but has no effect on the level of educational qualifications required to become a teacher.

Figure 3. Estimated ATT Effects of Democratization on the Politicization of Education

Panel A: Content of Education

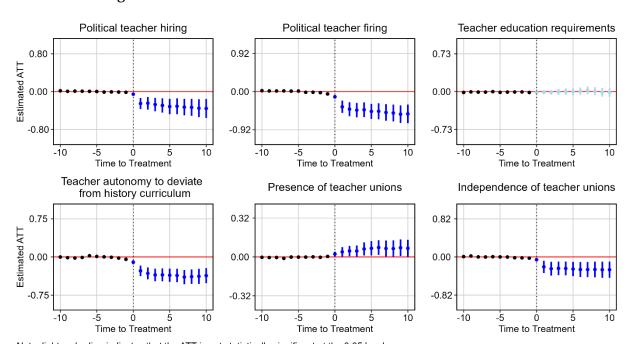


History curriculum promotes History curriculum promotes pluralism critical thinking 0.61 0.66 Estimated ATT ******** ********* 0.00 0.00 -0.61 -0.66 -10 -5 10 -10 -5 5 10 5 Ó Ó

Note: lighter shading indicates that the ATT is not statistically significant at the 0.05 level.

Time to Treatment

Time to Treatment

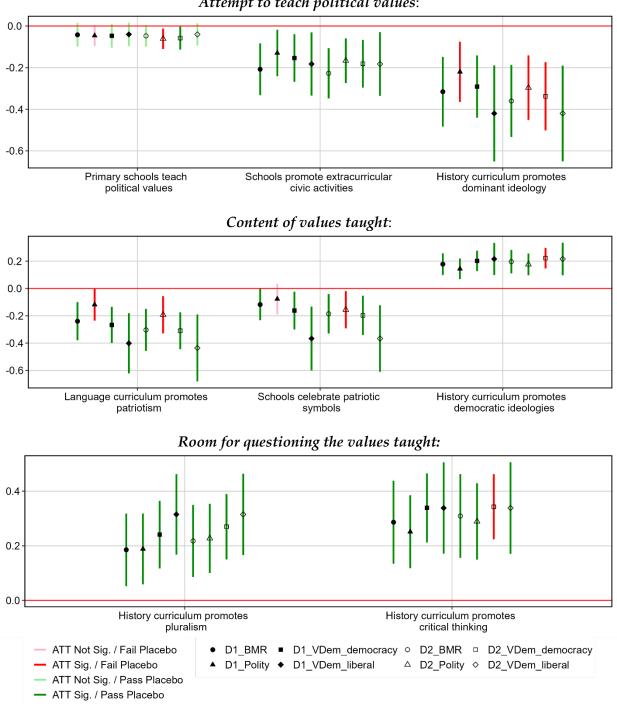


Panel B: Teaching Career

Note: lighter shading indicates that the ATT is not statistically significant at the 0.05 level.

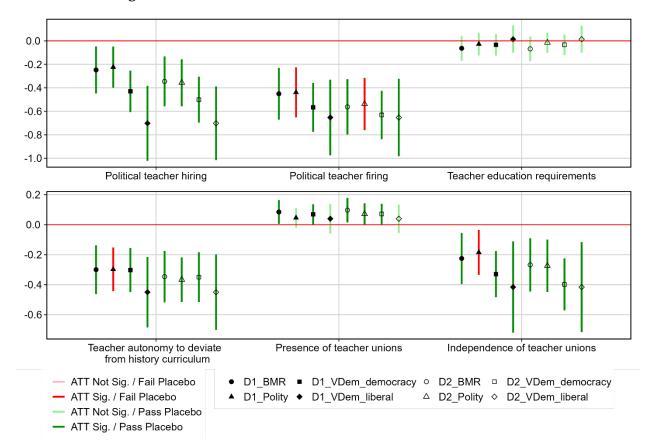
Figure 4. Placebo Test Results and Robustness of the Estimated ATT Effects at t=10 across **Measures of Democratization**

Panel A: Content of Education



Attempt to teach political values:

Panel B: Teaching Career



How large are the effects of democratization, and specifically, to what extent does democratization contribute to eliminate the politicization of education that existed prior to the onset of democracy? To answer this question, we first calculate the mean value of each dependent variable among treated countries right *before* democratization, and then use this to calculate the total change that would be needed in that variable in order to eliminate the politicization of education that existed before the onset of democracy. We then use the estimated ATT effects for that variable (across models that pass placebo tests) to calculate what percentage of this total change can be accounted for by the effect of democratization. For example, suppose that (i) a variable can range from 0 (no politicization) to 3 (full politicization), (ii) the variable's mean value before democratization is 2, which implies that it would need to decline by 2 in order for the politicization of education to be eliminated, and (iii) the estimated ATT effect of democratization is 0.5. In this hypothetical scenario, democratization that existed before the onset of democratization to the remaining level of education politicization that existed before the onset of democratization that existed before the one-fourth (25%) of the remaining level of education politicization that existed before the onset of democracy.

The results of this exercise reveal that the largest effects of democratization appear in the realm of teacher firing and hiring. Specifically, democratization contributes to eliminate 50% and 43%, respectively, of the level of politicization in firing and hiring that existed before the onset of democracy. By contrast, democratization has small to moderate effects on the content of education. For example, with respect to education systems' attempt to teach political values,

democratization barely affects the likelihood that primary schools will have a mandatory subject focused on teaching political values, but it eliminates 17% of the politicization that comes from schools' promotion of extracurricular activities, and 19% of the politicization that comes from using the history curriculum to promote a specific societal model or ideology. In addition, democratization contributes to promote 15% of the total change that would be needed in order for history lessons to extensively promote critical thinking skills.

These findings imply that while democratization does contribute to reduce the politicization of education to varying degrees, it falls short of eliminating the politicization of teaching jobs, and especially, the politicization of the curriculum.

IMPLICATIONS FOR FUTURE RESEARCH

The patterns we have documented in this study reveal two important questions for future research. First, why does the politicization of education persist after democratization? Here, future research could examine two alternative explanations. First, perhaps politicians in new democratic regimes *do not want to* substantially reduce the politicization of education; perhaps they believe that maintaining the politicization of educational content can help instill the values needed for democratic stability and/or believe that maintaining some politicization of the teaching career can help them win elections. Alternatively, perhaps politicians in new democratic regimes *do want* to reduce the politicization of education, for instance if they face pressure from citizens or international organization, but nonetheless find it *difficult* to do so because of the greater number of veto players in a democracy.

The second key question for future research that stems from our analysis is: What explains the decline in the politicization of education preceding democratization? Here again, future studies could consider at least two different explanations. One possibility is that this decline reflects an *elite-driven* process in which non-democratic rulers facing pressure to liberalize some sectors of society, such as schools, in order to appease potential dissenters in hopes of preventing further pressure for democratization, or, at least, a process of democratization driven by social revolution. Another possibility is that the decline in the politicization of education before democracy reflects a *bottom-up process led by teachers* who become frustrated with the non-democratic regime and begin to deviate from the prescribed curriculum, promote more critical thinking than the regime would want, and contribute to shape future citizens who, later on, help bring down the regime.

Finally, while in this study we have stayed away from making normative arguments, the empirical patterns we identify raise important political theory questions. At present, schools in democratic regimes place relatively more emphasis on instilling respect for democracy than on promoting critical thinking skills which might lead students to question the value of democracy. Is this the right balance? Should education systems prioritize societal goals such as political stability over individual goals such as personal autonomy? These are contested and complex questions that deserve more attention.

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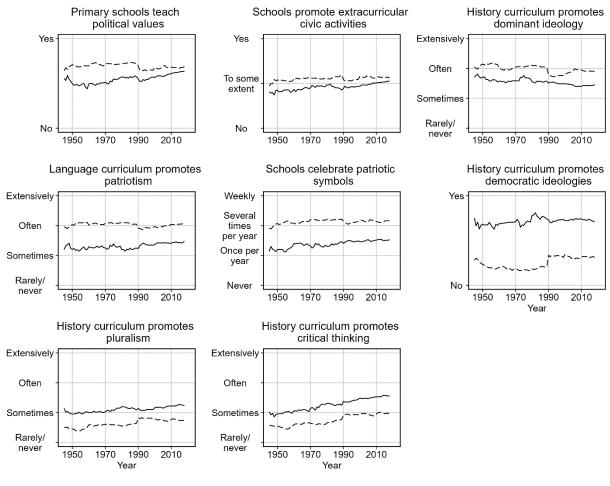
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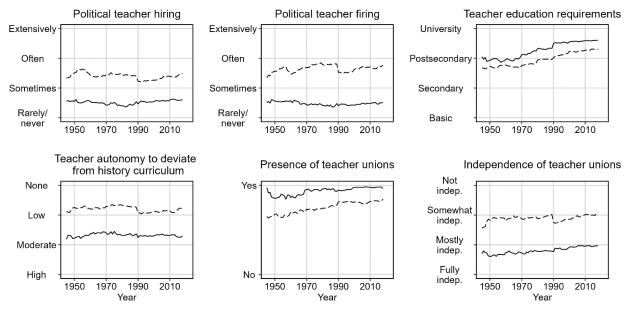
Online Appendix

Figure A1. Politicization of Education in Democracies and Non-Democracies, 1945-2018 – Restricting the analysis to observations coded by at least three education experts

Panel A: Content of Education



-- Non-Democracies - Democracies



Panel B: Teaching Career



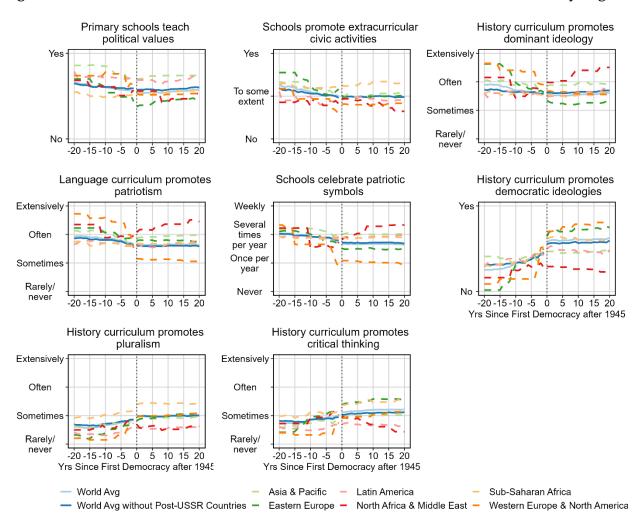


Figure A2. Content of Education 20 Years Before and 20 Years after Democratization, by Region

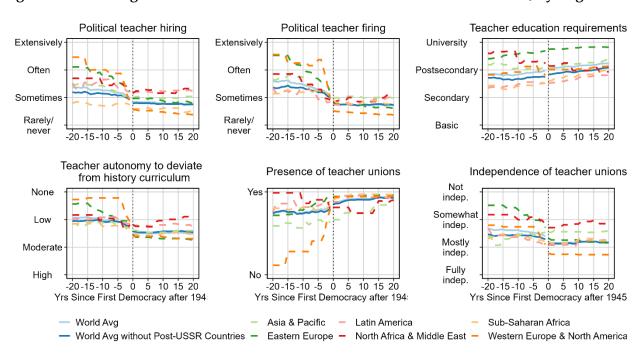


Figure A3. Teaching Career 20 Years Before and 20 Years after Democratization, by Region

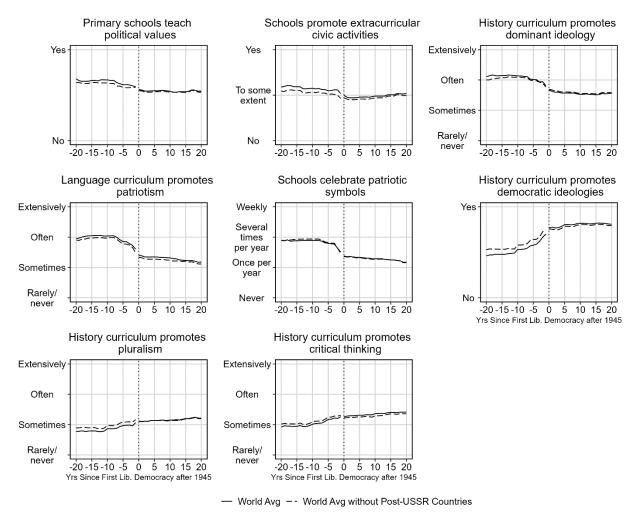


Figure A4. Content of Education 20 Years Before and 20 Years after Transition to Liberal Democracy

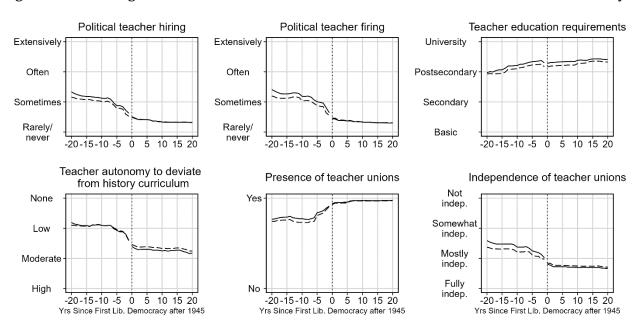


Figure A5. Teaching Career 20 Years Before and 20 Years after Transition to Liberal Democracy

- World Avg -- World Avg without Post-USSR Countries

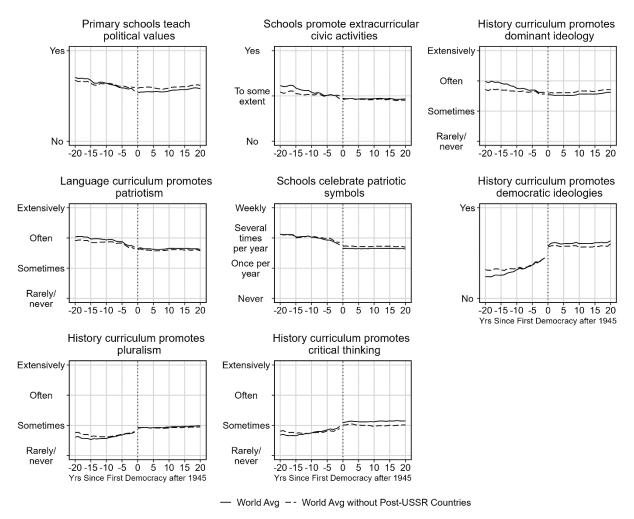


Figure A6. Content of Education 20 Years Before and 20 Years after Democratization – Restricting the analysis to observations coded by at least three education experts

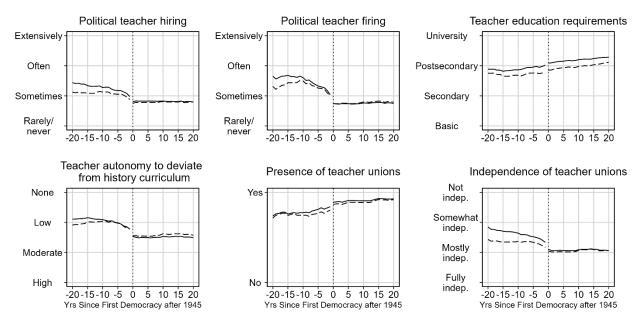


Figure A7. Teaching Career 20 Years Before and 20 Years after Democratization – Restricting the analysis to observations coded by at least three education experts

- World Avg -- World Avg without Post-USSR Countries

Table A1. Pairwise correlation between dependent variables

Panel A: Content of Education

	v2edpoledprim	v2edscextracurr	v2edideol	v2edideolch_rec	v2edpatriot	v2edscpatriotceleb	v2edplural	v2edcritical
v2edpoledprim	1							
v2edscextracurr	0.2963	1						
v2edideol	0.4058	0.2983	1					
v2edideolch_rec	0.0052	-0.0396	-0.2868	1				
v2edpatriot	0.2584	0.1294	0.5393	-0.3675	1			
v2edscpatriotceleb	0.1779	0.1787	0.3504	-0.32	0.5462	1		
v2edplural	-0.0261	0.1109	-0.1565	0.516	-0.1846	-0.1539	1	
v2edcritical	-0.0881	0.0338	-0.2451	0.5301	-0.2665	-0.2867	0.6837	

Panel B: Teaching Career

	v2edtehire	v2edtefire	v2edteautonomy	v2edtequal	v2edteunion	v2edteunionindp
v2edtehire	1					
v2edtefire	0.7197	1				
v2edteautonomy	0.5082	0.5453	1			
v2edtequal	-0.1457	-0.1948	-0.2674	1		
v2edteunion	-0.2945	-0.4131	-0.3606	0.3855	1	
v2edteunionindp	0.6388	0.7113	0.5891	-0.1979	-0.3217	1

Table A2. Alternative d	lefinitions of treatment onset
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Variable that indicates	Underlying source/ measure	Timing of democratization	
treatment status	of democracy	refers to:	
D1_BMR	Democracy according to Boix,	First transition to democracy	
	Miller, and Rosato (2012)	since 1800	
D1_Polity	Polity between 6 and 10	First transition to democracy	
	according to Polity Project	since 1800	
D1_VDem_democracy	Electoral or liberal democracy	First transition to democracy	
	according to Varieties of	since 1800	
	Democracy dataset		
D1_VDem_liberal	Liberal democracy according	First transition to democracy	
	to Varieties of Democracy	since 1800	
	dataset		
D2_BMR	Democracy according to Boix,	First transition to democracy	
	Miller, and Rosato (2012)	since 1945	
D2_Polity	Polity between 6 and 10	First transition to democracy	
	according to Polity Project	since 1945	
D2_VDem_democracy	Electoral or liberal democracy	First transition to democracy	
	according to Varieties of	since 1945	
	Democracy dataset		
D2_VDem_liberal	Liberal democracy according	First transition to democracy	
	to Varieties of Democracy	since 1945	
	dataset		