An Exploration of Spillover Effects: Evidence from Threat-Induced Education Reform

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Abstract:

This study explores spillover effects between national security and education issues. I examine whether the rise of new foreign threats is correlated with education issues rising onto the congressional agenda and with the passage of education laws. To answer this question several data sources on military conflicts and congressional activity from 1947-2015 were combined. I estimate the relationship between changes in deployed troops, the presence of education issues on the congressional agenda, and the passage of education laws. I find that total troop changes were a significant predictor of the passage of education legislation. This relationship is partially mediated by education issues rising onto the congressional agenda. The arrival of a foreign threat appears to create a shock that raises national security issues and subsequently education onto the congressional agenda. These findings help to explain delays to policy maintenance and the focus on short term goals in education reform.

When and why does Congress pay attention to education issues? Historically, education reform has occurred in the months after the emergence of new foreign threats. Congress passed the National Defense Education Act (NDEA) in response to the rise of the Soviet Union, the Elementary and Secondary Education Act (ESEA) during the escalation in Vietnam, and enacted No Child Left Behind (NCLB) months after the attacks on September 11th. This shift in attention from national security to education is an example of issue spillover (Jones and Baumgartner 2005). Few studies have examined the mechanisms leading to spillovers between specific issues (i.e. national security and education).

I utilize data on U.S. troop deployments, congressional attention to education, and passage of education laws from 1947 to 2015. I conduct a mediation analysis to model the spillover of attention from the arrival of a foreign threat to education issues. More specifically I examine whether education issues rising onto the congressional agenda mediate the relationship between changes in troop deployments and the passage of education laws. The regression results provide descriptive evidence for a spillover effect. The arrival of a foreign threat produces a shock that is first associated with attention to national security issues and subsequently to education issues, which leads to the passage of education reforms.

These findings have important implications for understanding spillovers. The results imply congressional attention may shift between issues that don't have a clear conceptual similarity. The focus on national security the precedes attention to education may result in policymakers treating education issues as a crisis. A possible consequence is privileging specific educational outcomes and short-term goals. These findings suggest that education reforms during peacetime occur infrequently. Long periods without new foreign threats may indirectly result in more infrequent policy maintenance. This can create undesirable uncertainty for policy implementors and delay necessary policy maintenance.

Elementary and Secondary Education Act

Historically the emergence of a new foreign threat has occurred contemporaneously with education reforms. Numerous efforts to reform federal education policy failed before ESEA. Davies (2007, 9) identifies three factions (anti-segregationist, anti-statists, religious groups) that opposed national education reform. Congress overcame these roadblocks in 1965, when the shock sent from the escalation of the cold war in Vietnam sent a powerful signal to Congress. This led groups that were previously opposed to the ESEA to recharacterize how they were interpreting the problem that education aid would address (Davies 2007). Anti-segregationists wanted to condition the receipt of federal aid on desegregating schools. Racists in both parties were opposed to this policy and blocked initial reform efforts. The escalation of the Cold War recontextualized segregationist education policies as incompatible with the country's image as a worldwide leader for freedom and as anathema to our foreign policy objectives (Dudziak 2011). Conservatives who thought the federal government should stay out of education policy were concerned about a rising "red" influence. They thought that increasing spending on social programs like schools led the nation on a path to Communism. The military conflict in Vietnam altered the interpretation of how anti-statists viewed schools as necessary to train scientists (Davies 2007; Loss 2012). Finally, Protestants and other religious groups were opposed to the idea of parochial schools receiving government aid. The anti-Christian nature of Communism recontextualized education reform as needed to train soldiers to combat these threats (Myers and Cibulka 2014). Once the supporters of education reform were able to overcome the opposition of these three constituencies, the general popularity of ESEA eased the passage of the bill into law.

No Child Left Behind

In the fall of 2001, the House and Senate had each passed their version of NCLB. However, the two bills had little in common and passage appeared unlikely (Robelen 2001). The September

11th attacks sent an enormous shock that changed how key opponents to NCLB interpreted signals about education. The Authorization for Use of Military Force against Terrorists was passed on September 14th and Congress agreed to the compromised legislation a couple of months later. Congress treated NCLB not as education reform but rather as national security legislation (Debray 2006). Education Secretary Rod Paige made clear that the Bush administration viewed NCLB as national security legislation: "the events of September 11th didn't make an education bill less important, it made it more important. Education is a national security issue. This is not something we can put on the shelf and come back to later" (Lee 2001). Future Bush Education Secretary Margaret Spellings argued the "silver lining" of the September 11th attacks was the shift in how Congress perceived NCLB. There was, "a recognition that we had to strike while the iron was hot" (Samuelsohn and Vinik 2015).

The same key conservative constituencies that initially prevented the passage of ESEA were blocking NCLB before September 11th. A bloc of conservative legislators opposed federal requirements for racial and ethnic minorities to reach proficiency benchmarks (Debray 2006). Evangelical Christians pushed religious school vouchers and protections for students who prayed in schools (McGuinn 2006). Small-government conservatives opposed proscriptive federal mandates and increased spending. President Bush, Secretary Paige, and Republican congressional leadership (e.g., Chairman Boehner and Majority Leader Lott) pressured Republicans to compromise and "demonstrate that [Congress] was not immobilized and could still tend to the nation's needs" (Debray 2006, 81). There was a clear sense that passing NCLB could "show the country had not been derailed by the attack" (Mehta 2015, 239).

Few studies have examined the circumstances under which education policies rise onto the governing agenda or are passed into law (Kirst and Wirt 2009; Manna 2006; Watkins 1990). Baumgartner and Jones (2005) do find evidence for congressional spillover, but also that attention to

defense issues is negatively correlated with several domestic education policies. This analysis builds on their study of spillovers by examining the relationship between national security and education issues.

Threat-Induced Education Reform

Organizational Decision-Making

A potent analytical strategy when examining political processes such as agenda setting and lawmaking is to expand the scope of study across time (Pierson 2000; Skocpol 1995). Studying past events can help to identify patterns in contemporary phenomena. This approach is also useful for describing how macro-level contexts like international relations can affect policymaking processes (Orren and Skowronek 2004).

I employ Jones and Baumgartner's behavioral model of policy choice (2005). They argue that organizations tend to strongly defend status quo policies which creates tremendous resistance towards change (Jones and Baumgartner 2005). This bias stems from limits on attention allocation in addition to familiarity and comfort with a set of problems and solutions. When new information about an issue is strong enough to overcome this friction, large changes may occur as a result. This resulting shock can pervade the policymaking process and upend the status quo.

Jones and Baumgartner (2005) explain that for an organization to address an issue they must first recognize its existence. Organizations respond to signals or observable changes in the world. Signals are characterized by their degree of certainty and ambiguity. Certainty is the likelihood that a change has occurred and ambiguity is the likelihood that a change is accurately understood. Interpreting the signals associated with issues leads organizations to prioritize the issues under consideration. A signal that is either highly certain or unambiguous indicates a severe issue that can

lead to a state of "alarmed discovery" (Downs 1972). This reaction to novel or previously underappreciated information leads new issues to intrude upon the agenda.

According to Jones and Baumgartner's theory (2005), organizations must interpret the information they collect in the policymaking environment. Information processing is noteworthy for its lack of neutrality because signals elicit emotional reactions. As a consequence, a single interpretation of information rarely dominates. Rather varied interpretations of information compete with each other. Organizations place greater weight on some interpretations or dimensions than others. The characterization of an issue is inherently political. Interested parties will strategically manipulate political anxieties and enthusiasms to ensure a specific policy response. If a signal is particularly strong then the characterization of its underlying dimensions may also have implications for how other signals are interpreted. For example, the start of a foreign conflict can alter the characterization of a domestic policy issue.

Jones and Baumgartner (2005) argue, the interpretation of information provides organizations a set of attributes to consider. Organizations may search for new alternatives or employ past solutions when facing the same issue. Occasionally the information is so clear and unambiguous that a specific response is merited without much further consideration (i.e., military response after an attack) (Baumgartner and Jones 2015). More typically an organization will consider several policy alternatives.

Issue Spillover

After an organization considers an issue and implements a solution their attention will "spillover" to another issue. Issues spillover occurs when legislative consideration of one issue has important implications for another (Jones and Baumgartner 2005, 259). Spillovers can occur due to political ideology, the convergence of public opinion, or a shift in the general public mood (Howlett

1998). For example, the proposed deregulation of trucking and rail after the successful reforms to the aviation sector (Kingdon 1995).

A more complex set of dynamics between issues may also lead to spillover (Hilgartner and Bosk 1988). "Interagenda interactions" can cause spillovers (Liu, Lindquist, and Vedlitz 2011, 408) when the issues under consideration influence future decisions about the issues that rise onto the agenda. When the government goes to war, it activates a chain of events that influence the entire public sector. For example, the public zeitgeist may overreact to the emergence of a new foreign threat and demand action from the government across a broad spectrum of issues.

In his seminal work on spillover, Walker (1977) argues that Senators can reap political benefits from proposing innovative legislation. The passage of novel policies allows the Senators to claim political credit (Kingdon 1995). Walker (1977) observes that Senators after successfully passing auto safety legislation quickly moved onto other safety issues. However, they quickly exhausted the well of available safety issues, which led their attention to spillover onto other issue areas.

Successful passage of one policy may beget the passage of policies in other issue areas. Policy entrepreneurs often seek to exploit previous successful passage of legislation to benefit their preferred policy (Kingdon 1995). The first political success transforms the politics around the policymaking process and builds a political coalition for the next fight.

The shock from the emergence of a new foreign threat sends a powerful signal to Congress. This signal from war is characterized by a high degree of certainty and very little ambiguity. Due to the severity of national security issues, the entire agenda is reprioritized (Kingdon 1995; Jones and Baumgartner 2005). After Congress addresses the issue of the new threat the political momentum encourages attention to the next issue on the agenda.

Reasons for Spillover to Education Issues

There are three reasons why congressional attention spills over from a new foreign conflict to education reform. Walker (1977) finds that Congress can quickly exhaust their possible responses to an issue, which opens up the agenda for attention to other issues. The Constitution assigns a relatively narrow role to Congress after the arrival of a new foreign threat beyond the authorization of force and the appropriation of funding. After fulfilling these responsibilities, the initial shock of the new conflict continues to encourage additional legislative action.

The arrival of a new foreign threat alters the public mood in a manner that encourages policymakers to consider education issues. The emergence of a new foreign threat is associated with higher levels of stress and anxiety (Murthy and Lakshminarayana 2006). The financial cost of military conflicts along with the political costs of casualties are associated with a decrease in the popularity of elected officials (Geys 2010). Focusing attention on education sends a politically advantageous message about a positive future. Elected officials have a strong electoral incentive to pursue education reform, which is historically popular and benefits from strong bipartisan support.[1] Voters favor government action over education reform at rates higher than every other policy area (Stimson 2016b).

Finally, among domestic policies education is uniquely suited as a solution for a new foreign threat. Schools provides students with the skills they will require as soldiers including literacy, numeracy, and foreign languages (Clowse 1982). Education reform advocates have routinely cited the need to train future researchers and develop new technologies (Loss 2012).

[1] In Stimson's polling data the mean education public support is 67 and it never fell below 61 (Stimson 2016a). Polling data on education reform (available from 1956 to 2010) bear out Davies' hypothesis (2007) about the popularity of increasing spending.

Research Questions and Contribution

An important contribution of this research is to build upon the literature that finds a relationship between congressional attention to military and higher education issues. Stuart Leslie's (1993) conception of the, "military-industrial-academic complex" explains the close link between higher education institutions and the military. Universities conduct the majority of basic research and train all scientists that work for the defense industry. Military support for research at universities increased dramatically during WWII and again at the start of the Cold War (Heymann and Martin-Nielsen 2013; Loss 2012; Leslie 1993; Krige 2008). Governments viewed investing in Research and Development as a pivotal aspect of national survival (Bell 2009). Higher education policies (e.g., Student Army Training Core, GI Bill, National Defense Education Act,) were all launched in the wake of military conflicts to achieve military objectives (Leslie 1993; Loss 2012).

I examine spillover effects or the strength of the association between foreign conflicts and education reform in primary and secondary education. Previous studies have examined key moments in primary and secondary education reform, such as the passage of the Elementary and Secondary Education Act (ESEA) in 1965; (Davies 2007; McGuinn 2006; Thomas 1975), the creation of the Education Department (Radin and Hawley 1988), and the passage of NCLB (Manna 2006; 2010; McGuinn 2006). Quantitative analyses of the political dynamics that shape primary and secondary education policymaking for lawmakers in Washington across time is an area deserving of further study (Cohen-Vogel and McLendon 2009).

I examine the association between foreign conflicts, the congressional education agenda, and education law passage between 1947 and 2015. A strength of this approach is that it allows me to measure the political dynamics of primary and secondary education across several periods of reform (e.g., the civil rights era, the accountability movement). Rather than focusing on predictors of

specific education laws, I examine correlations across the history of education reform with these questions:

1. After the start of a foreign conflict does congressional attention spillover to education issues or predict the passage of major education laws?
2. To what extent does the rise of education issues onto the congressional agenda explain any observed relationship between the start of foreign conflicts and the passage of major education laws?
3. To what extent do other observable structural and political characteristics predict education issues rising onto the congressional agenda or the passage of major education laws?

Data and Methods

Education Laws

I combine several data sources on military conflicts, media reports, and congressional activity. The main outcome of interest is a binary measure of whether a primary or secondary education law was passed.[2] This measure is equal to one if an education law passed and zero otherwise. To create this measure I used congressional bill data (Adler and Wilkerson 2017), which includes every bill introduced from 1947 to 2015.[3] I restricted the dataset to include only bills that became law and were primary and secondary education issues.[4] I further restricted the dataset to exclude legislation that was either nonsubstantive (e.g., a technical correction, interstate compact, or

[2] From this point *education issues* refers exclusively to primary and secondary education issues.
[3]Adler and Wilkinson (2017) collected data from 1947 to 2014. I appended data from 2015, when the Every Student Succeeds Act passed.
[4] The subject of congressional bills was coded using the Policy Agenda Codebook (Policy Agendas Project 2015e). I restricted primary and secondary education laws to the following subcodes: 600- Education General, 602- Elementary and Secondary Education, 603- Education of Underprivileged Students, 607- Educational Excellence.

affecting a single school district) or unrelated to primary and secondary education (e.g., pre-kindergarten, libraries, forest service, or vocational training).[5]

Education on the Congressional Agenda

To measure the presence of education issues on the congressional agenda, I used Binder's gridlock (2014; 2003) dataset. I define the congressional agenda as the set of issues that have captured the attention of Congress and also enact substantive changes to policy or appropriations. This operationalization excludes common congressional activities (i.e., debate, oversight, hearings) and changes to laws that are small in scope (i.e., technical corrections, narrowly tailored legislation, reauthorization of non-controversial programs). This strengthens my analysis because it identifies issues that will result in legislation from Congress that will likely have an impact on schools. Binder (2003) used *New York Times* editorials to identify issues on the national policy agenda.[6] If the editorial board called for congressional action, comments on past action from Congress, or warns against future action, it counted as a mention of that issue. A strength of this approach is that the editorial board pays close attention to all of the issues that are under consideration by Congress. I

There are two principal advantages to using editorials to measure the agenda. First, bills and hearings often cover many topics, which makes it difficult to identify whether a law results in major changes to education policies. For example, the Race to the Top program was one section of the American Recovery and Reinvestment Act of 2009 (ARRA) and also an important federal education policy that influenced schools throughout the country (Howell and Magazinnik 2017). In the Congressional Bills Project data, the code for ARRA is Government Operations and on Congress' website the policy area is Economics and Public Finance. Using the main subject of either hearings or bills will not count major changes to education that were included in omnibus laws or

[5] Two education laws were passed in five years: 1965, 1969, 1977, 1990, and 1993.
[6] Binder (2003) used unsigned editorials written by the entire board.

appropriation bills that consolidate spending for several policy areas. Binder's measure is not affected by this problem because the New York Times editorial board identifies each of the issues that the Recovery Act addressed. Second, using bills or hearings will both over and under count issues on the congressional agenda. Using bill introduction, committee consideration, or hearings will overcount education issues because these activities occur frequently and are weakly correlated with the passage of laws. Congress holds an average of about 35 education hearings every session, which can occur due to a variety of parochial political interests that may be unrelated to the congressional agenda. In addition, using House or Senate votes will undercount education issues. Committee Chairs and Leadership (e.g., Speaker of the House, Majority Leader) have both formal and informal powers to prevent their chambers from voting on bills. For example, prior to the passage of ESEA, Education Committee Chair Powell blocked and education aid bill from making it out of committee (Davies 2007). Many bills that are on the agenda do not receive a vote by the full House or Senate. Using Binder's measure allows for a more accurate accounting of the issues on the congressional agenda.

Other empirical studies use hearings to measure an issues presence on the agenda (Jones and Baumgartner 2005). In their theoretical model, issues rise onto the agenda prior to passage. This suggests the two constructs have a significant positive correlation. However, the association between education hearings and education law passage is weak.[7] This result is consistent with Baumgartner and Jones analysis that finds weak correlations between hearings on economics and crime issues with passage of laws in those policy areas (Jones and Baumgartner 2005, 228–29). The moderate and

[7] Tables 2 and 4 show that the association between hearing days lagged and passaged of an education law is a precise zero after conditioning on covariates. The results are quite similar when including other variables measuring characteristics of hearings (i.e., total hearings, number of sessions, length of hearings in days, both lagged and not lagged).

significant association between Binder's agenda measure and law passage is evidence of the measure's criterion validity.

The gridlock dataset describes whether an issue is on the agenda during a specific Congress. To construct an annual measure of gridlock, I relied on the notes in the dataset. These included details from the research assistants who collected the data, descriptions of bills/laws, and citations from the *Congressional Quarterly Almanac* (2017) and the *New York Times* (2017). From these data, I generated the mediator variable: the presence or absence of an education issue on the congressional agenda in a specific year.[8]

Changes in Deployed Troops

The independent variable is the year-to-year change in the number of active-duty military personnel deployed in a country that the United States had engaged in an armed conflict. To create this variable, I identified all American armed conflicts and years in which they occurred in the Uppsala Conflict Data Program/International Peace Research Institute Armed Conflict Database (UCDP/PRIO 2016).[9] With these data I merged the active-duty troop deployments by country (Department of Defense 2017).[10] I then calculated the year-to-year change in the number of troops deployed in foreign countries that were engaging the U.S. in an armed conflict. Calculating the difference between years allowed me to estimate the shock associated with the deployment of troops. This operationalization captures substantively meaningful differences when an armed

[8] I restricted the gridlock data to include only issues with macro code 6 for education.
[9] UCDP/PRIO defines an armed conflict as "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year" (UCDP/PRIO 2016).
[10] In the DoD report it appears that the Korean War began in 1951. The DoD created the report prior to the start of the Korean War in June 1950. The troop change value in 1950 was changed to reflect this fact. All conflict start dates were validated with multiple sources (Torreon 2017; UCDP/PRIO 2016).

conflict escalated. Ideally, I would construct a measure of congressional attention to foreign conflicts using the same procedure that I used to create the measure of congressional attention to education. This is not possible because the timing of congressional attention to foreign conflict is weakly correlated with formal congressional action on foreign conflict. Congress frequently authorizes military action years before the start or peak of a conflict. For example, the initial authorization for the wars in Vietnam and Iraq were passed several years prior to the peak of those conflicts.[11] In other cases such as Afghanistan the authorization is contemporaneous with military action. An important assumption of this analysis is that when the President increases the number of deployed troops the foreign conflict is an issue on the congressional agenda.

Covariates

To control for concern about foreign threats I used a measure of national security issues. I created this measure using the Policy Agendas Project's *New York Times Index Data Codebook* (2015c). The index includes a description and policy area code for the first article on every odd-numbered page of the *New York Times* from 1946 to 2014.[12] The measure is equal to the standardized number of articles on defense issues in a year (Policy Agendas Project 2015e). This code (Policy Agendas Macro Code 16) includes a wide range of national security issues, such as descriptions of foreign conflicts and news about the military. The main independent variable captured the shock that occurs at the start of a large military conflict. Conversely, the national security issues variable measures other defense related issues (e.g., Defense Appropriations, Military Aid and Weapons Sales to other Countries, Veterans Affairs). The two variables are virtually uncorrelated and explain different

[11] Congress formally revoked authorization for force in Vietnam, which President Nixon subsequently escalated.

[12] The national security issues measure was imputed in 2015 using the predicted outcome from regressing the national security issues measure on a linear year trend. The mediation results have similar sign, size, and significance when the observation for 2015 is case-wise deleted and if the variable is excluded from the model.

variation in the outcomes of interest. Including the national security variable as a covariate improves the precision of the estimates.[13]

Manna (2006) developed a general theory of how the federal government "borrows strength" from states to raise education issues onto the agenda and support their passage into law. The probability of raising an education issue onto the congressional agenda increases when federal policymakers leverage state license and capacity. *Capacity* refers to legislators' ability to implement a proposed reform, including whether state education agencies possess the necessary staff, financial resources, and institutional structures. To operationalize capacity, I included total state education revenues (NEA Archives 2018; NCES 1995; 2015; 2017).[14] If states lack sufficient resources to carry out reforms, federal policymakers may hesitate to consider adding requirements. *License* describes the strength of the arguments available to policymakers. One source of license is state political support for education reform (Manna 2006). To measure state license I added a binary variable equal to one if the number of governors focused on education reform exceeded 25 (Henig 2013).[15] If the number of governors who support education reform is high, federal policymakers should seek to build on that support and pass national education laws. To measure democratic pressure for congressional attention to education issues I added the percent of respondents who identified education as the country's most important problem on Gallup's quarterly survey (Policy Agendas Project 2015a) and

[13] The correlation between the two measures is low (r = -0.001). Ideally this variable would measure nonviolent events like the Soviet launch of *Sputnik* or the Cuban missile crisis. However, this variable takes on a below average value in the years in which these events took place.
[14] State education revenues are measured in tens of billions of dollars. State education revenues were not available for five years (1947, 1949, 1951, 1953, 1955). In these years state education revenues were imputed to be the average of the adjacent years. The mediation results are qualitatively similar both when these years are excluded and when the covariate is removed from the model.
[15] Henig's data are available through 2010. Following his coding strategy (Henig 2013) I identified education governors in subsequent years (2011-2015).

the SAT score composite (NCES 2004; Wirtz and Howe 1977).[16] High levels of concern about education issues or changes to SAT scores may send signals to Congress about education issues.

To control for political dynamics, I added a series of covariates associated with national politics. Binder (2003; 2014) defined gridlock as the ratio of failed measures to all issues on the agenda in a congressional session. Mayhew (2011) and Binder (2014) hypothesized that gridlock would be correlated with control of Congress and the White House by a single party. In the most recent work Binder finds the relationship between gridlock and divided government is statistically insignificant. A single party in control afforded the party the political power to implement its agenda. I included three binary variables equal to one if the Democratic party controlled the House, Senate, or White House and zero if the Republican party controlled these institutions (Policy Agendas Project 2015d). Party polarization also correlated with gridlock (Binder 2003; 2014). To operationalize polarization, I used the difference in mean party ideology (Poole and Rosenthal 2016).[17] As the ideological gap between Democrats and Republicans widened, Congress passed less legislation on average. I also included a measure for the number of congressional hearings on education issues in the previous session, which is theorized to correlate with the passage of education laws (Policy Agendas Project 2015b; Jones and Baumgartner 2005).

Results

Sample

From 1947 to 2015, education rose onto the congressional agenda 27 times and Congress passed education laws in 21 years. When education was on the agenda, Congress frequently passed

[16] All SAT scores were converted to the recentered SAT scale (The College Board 2018).
[17] I took the average of the polarization variable for the Senate and House, which is the "Difference in Party Mean," for the first dimension DW-Nominate score and rescaled the variables to have a theoretical range from -100 to 100.

education legislation (52%). When education was off the agenda, Congress passed relatively fewer education laws (17%). By construction, the troop difference variable has a mean of zero because during the period of study all deployments were eventually withdrawn (Table 1). The number of governors concerned with education reform (education governors) rose over time. There were 25 or more governors focused on education issues in every year since 1999. State education revenues have increased across time even after adjusting for the inflation (consumer price index [CPI] = 2000). Democrats typically held the majority of seats in Congress from 1947 to the mid-1990s. The major parties split control of the White House during the period of study.

<Insert Table 1 Here>

Figure 1 depicts the changes in troop levels over time. The largest deployment was 326,000 troops sent to Korea in 1950. Subsequent sizable troop changes occurred during conflicts in Vietnam, Iraq, and Afghanistan. Large troop increases were followed by commensurate decreases in troop levels. The period from the end of the Vietnam conflict to the Desert Storm operation in Iraq was relatively peaceful.

<Insert Figure 1 Here>

Descriptively, an education issue rising onto the congressional agenda typically precedes the passage of an education law (See Table 2). The probability of Congress passing an education law was significantly higher (35%) when education was on the agenda. The change in the number of deployed troops was significantly higher (60,000 troop increase from previous year) when education was on the agenda. In the years after the start of a military deployment, the unconditional probability of education rising onto the congressional agenda was significantly higher. The change in deployed troops increased when congress passed education laws, but the difference is statistically insignificant.

<Insert Table 2 Here>

Analytic Strategy

I conduct a mediation analysis (Baron and Kenny 1986) to estimate the dynamics correlated with issues rising on to the congressional agenda and passage into law. This approach extends on the strategy employed by Jones and Baumgartner (2005, 227). I estimated a series of linear probability models that assumed the following general form:[18]

$$Y_t = \beta_0 + \beta_1 troops_t + \beta_2 nat\_sec_t + \gamma \boldsymbol{S'}_t + \alpha \boldsymbol{P'}_t + \beta_3 year_t + \mu_t$$

where *Y* is a binary variable indicating that either education is on the congressional agenda or that Congress passed an education law in year *t*. *Troops* is a continuous measure of year-to-year changes in troop levels in year *t*. β_1 is the coefficient of interest; it is interpretable as the change in the probability of an education issue rising onto the congressional agenda or the probability of Congress passing an education law. β_2 is the national security issues control variable in year *t*. $\boldsymbol{S'}$ is a vector of education characteristics that vary by year (*t*) including the number education governors; state education revenues; the proportion of respondents who identified education as the country's most important problem on Gallup's quarterly survey; the SAT score composite. $\boldsymbol{P'}$ is a vector of national political characteristics that vary by year (*t*) including indicator variables for Democratic control of the House, Senate, and Presidency; political polarization; congressional ideology; and hearings on education in the previous session. β_3 is a linear year trend. Standard errors are robust to heteroskedasticity.[19]

[18] Linear probability models and logistic regressions ought to produce equivalent estimates if the outcome event is neither rare nor common (i.e., probability of outcome is approximately between 0.2 and 0.8) (Hellevik 2009). Results from logistic regressions have similar sign, size, and significance (see Appendix Table B1).

[19] One potential concern with time series data is the presence of an autoregressive process where residuals are correlated across time. If the passage of an education law was correlated with education issues rising onto the congressional agenda in year t and year t-1, the estimates would be biased. To test for the presence of auto-correlation I estimated Durbin-Watson test statistics for the main models. Each were arbitrarily close to 2, which suggest there was no correlation between period t and period t-1.

Predictors of Education on the Agenda

Table 3 includes the hypothesized correlates of issues rising onto the congressional agenda. Column 1 includes the main independent variable and national security issues, column 2 adds state education characteristics, column 3 adds national political characteristics, and column 4 includes education and political characteristics. In each model a deployment of 100,000 troops in the previous year was associated with a significant increase in the probability of Congress considering an education issue. The relationship between having at least 25 education governors and education rising onto the congressional agenda was significant before national political characteristics were added to the model. In column 3, high levels of polarization were associated with higher probabilities of education issues rising on to the congressional agenda. This relationship becomes insignificant after the inclusion of state education characteristics. In column 4, changes in troops, increases in state education revenues, Democratic control of the House, and liberal Congressional ideology were significant predictors of education rising onto the congressional agenda. The correlation between changes in troop deployments and education issues rising onto the congressional agenda attenuated slightly when national political characteristics and state education characteristics were added. In column 4, a deployment of 100,000 troops in the previous year was associated with a 16% increase in the probability of education rising onto the congressional agenda.

<Insert Table 3 Here>

Predictors of Education Law Passage

In Table 4, the outcome is congressional passage of an education law. Column 1 includes the main independent variable and national security issues, column 2 adds state education characteristics, column 3 adds national political characteristics, and column 4 includes education and political characteristics. Changes in troop deployments remained a significant predictor of education law passage. In column 4, a deployment of 100,000 troops in the previous year was associated with a

12% increase in the probability of congressional passage of an education law. The size of the estimated association between troop change and law passage was weaker than the relationship between troop difference and presence on the education agenda. State education characteristics were insignificant predictors of education law passage. These results imply that having 25 or more education governors correlated positively with raising issues onto the congressional agenda but not with the passage of education laws. This is consistent with Manna's (2006) borrowing strength hypothesis. In columns 3 and 4, Democratic control of the Senate was associated with a large and significant increase in the probability of Congress passing education legislation. This differs from the pattern in Table 3 and suggests that Democratic control of the House was associated with education rising onto the agenda but Democratic control of the Senate increased the odds of final passage.

<Insert Table 4 Here>

Mediation Analysis

Table 5 includes the results from the mediation analysis. The dependent variable is specified in the first row. Changes in troop deployments were positively associated with the passage of education laws (column 1) and issues rising onto the congressional agenda (column 2). Appendix Figure A1 graphically depicts the predicted probability of education issues rising onto the agenda by changes in troop deployments. The predicted probability of an education issue rising onto the congressional agenda during peacetime was 40%. After a deployment of 100,000 troops, the predicted probability of education rising onto the congressional agenda rose about 16 points. As expected, the presence of education on the congressional agenda was a strong predictor of passage of an education law (column 3). Appendix Figure A2 shows the predicted probability of Congress passing an education law by changes in troop deployments. The predicted probability of education reform during peacetime was 30%. The predicted probability of Congress passing an education law rose nearly 10 points after a deployment of 100,000 troops. In the final stage of the mediation

analysis (column 4), the troop difference coefficient lost statistical significance and approached zero ($\beta = 0.027$, $p = 0.639$). This suggests that education issues rising onto the congressional agenda partially mediated the relationship between changes in troop deployments and the passage of education laws. State education revenues were significantly correlated with education rising onto the congressional agenda, but negatively correlated with passage of education legislation. The percent of people that report education is a major concern is insignificantly associated with education rising onto the agenda, but a positive and significant predictor of education law passage. This is consistent with the hypothesis that once education reaches the agenda, popular support encourages passage of legislation. In column 4, Republican control of the House and Democratic control of the Senate are both significant predictors of education law passage. This suggests that divided control of Congress is associated with an increased likelihood of education law passage. Congressional ideology is negatively correlated with education rising on to the congressional agenda and positively correlated with education law passage. This implies that more liberal Congresses are more likely to consider education issues, but more conservative Congresses are more likely to pass education laws.

<Insert Table 5 Here>

Testing Rival Hypotheses

To test whether rival hypotheses could explain education issues rising onto the congressional agenda and the passage of education laws, several variables were added to the mediation model. A weak economy may precede education rising onto the congressional agenda or the passage of an education law in an attempt to strengthen the labor force. In Appendix Tables A1 and A2, I add measures of GDP in Chained 2009 Dollars (Seasonally Adjusted) (U.S. Bureau of Economic Analysis 2017); not seasonally adjusted U6 unemployment rate (Bureau of Labor Statistics 2018); the proportion of respondents who identified the economy as the country's most important problem on Gallup's quarterly survey. Appendix Table A1 adds economic characteristics to the second stage of

the mediation analysis (Table 5 column 2) and Appendix Table A2 adds economic characteristics to the fourth stage of the mediation analysis (Table 5 column 4). Both results are quite robust to the inclusion of economic characteristics. In Appendix Table A1, none of the economic measures are correlated with education rising onto the congressional agenda. The sign, size, and significance of the troop differences coefficient is robust to the addition of these covariates. The results in Appendix Table A2 provide further evidence that education issues rising onto the congressional agenda partially mediates the relationship between changes in troop deployments and the passage of education laws.

I also tested whether mediation results were robust to the inclusion of additional national political characteristics. To obtain a measure of presidential support for education reform, I used the number of times education issues were mentioned during major *Presidential Speeches* (State of the Union) (Policy Agendas Project 2015d). I used these same data to measure a President's support for education reform (*Education President*) that is equal to one if a President mentioned education issues at least once, in half or more of their State of the Union speeches and zero otherwise. Both the *Presidential Speech* and *Education President* variables measure presidential policy preferences may influence congressional actions. I also include a binary measure for whether a federal election was held in a given year. Elections may shape whether Congress considers education issues or whether those reforms become law. Congressional attention and passage of education laws could also be a mechanical function of the ESEA reauthorization schedule. To test this hypothesis, I add a binary variable equal to one if ESEA was reauthorized in the past five years and zero in all other years. I also added a series of dummies that correspond to periods of education reform (Davies 2007; McGuinn 2006). The pre-reform period started in 1947 and lasted until *Brown v. Board of Education*. The Brown era extends from that landmark education case in 1954 to the passage of ESEA in 1965. The equity era ran from then until the Rose decision in Kentucky (1989). The accountability era has

lasted from 1989 until present day. Appendix Table A3 adds political characteristics to the second stage of the mediation analysis (Table 5 column 2) and Appendix Table A4 adds political characteristics to the fourth stage of the mediation analysis (Table 5 column 4). The results are robust to the inclusion of political characteristics. In Appendix Table A3, the political characteristics are not significantly related to education rising onto the congressional agenda. The relationship between the troop differences and education issues rising onto the congressional agenda is substantively the same. The finding that education issues rising onto the congressional agenda partially mediates the relationship between changes in troop deployments and the passage of education laws is further substantiated by the finding in Appendix Table A4. Education issues rising onto the congressional agenda remain a strong and significant predictor of education law passage, while the troop differences variable remains indistinguishable from zero and statistically insignificant.

A plausible explanation for the main mediation results is that the emergence of a new foreign threat is positively correlated with both the size of the congressional agenda and the number of laws passed. If true it would suggest that congressional attention was not spilling over from a new foreign threat to education. Rather the shock from the new foreign threat increased attention and legislative activity for many issues including education. To test these hypotheses, I add several measures of Congressional productivity. I use the Binder data to construct measures for the total number of agenda issues (*Agenda Size*) and the number of laws passed on the agenda (*Major Laws*). Using the Policy Agendas data, I create measures for the total number of hearings (*Hearings*) and the total number of public laws passed (*Total Laws*). Appendix Table A5 describes the results from models where I regress measures of congressional productivity on the troop changes variable and the same set of covariates as the mediation model (See Table 5). Troop changes are not a significant

predictor of the congressional measures of productivity. This provides descriptive evidence that the mediation results are not explained by higher levels of congressional productivity.

Discussion

These findings have important implications for understanding the congressional agenda and education policymaking. The results imply congressional attention will spillover from foreign issues to education policy, rather than other domestic policy issues (e.g., macroeconomic). The type of foreign threat appears to matter. The patterns in the data suggest that education issues rise onto the agenda at the start of hot wars rather than cold wars.

The dynamics that cause attention to education issues are important because they will also influence the success and failure of education policies. The results here suggest that Congress considers education issues after the shock from a new foreign conflict. The general public mood that causes this spillover contextualizes education issues as a response to the new conflict. In turn this could lead policy implementors to adopt an emergency mindset where education reforms were a part of the response to the larger crisis. An emergency mindset leaves little time to consider systematic problems with education systems and may privilege certain policies (i.e., privatization) or goals over each other (Lipman 2013; Slater 2015). For example, policymakers may focus on training workers and soldiers rather than teaching civics or the arts. The emergency mindset could also focus policymakers on short term "silver bullet" policies that are less likely to produce sustainable and positive change (Tyack and Cuban 1995). This approach to policymaking encourages superficial implementation where school leaders demonstrate compliance to outside stakeholders, while simultaneously finding ways to make the new policy consistent with existing processes resulting in little actual change (Braun, Maguire, and Ball 2010).

These findings imply that changes to education policies during peacetime are less likely to occur. During extended periods in which no new foreign threats emerge, Congressional inaction

may result in deferring necessary policy maintenance (Hess 2008; Mettler 2016). When Congress fails to reauthorize laws in a timely matter, unforeseen changes create a chaotic regulatory environment where schools lack the powers to address the issue. For example, in the period after the surge in Iraq (2007) no new threats emerged until 2015. NCLB was due for reauthorization during this window, but Congress took no action, which resulted in the Obama administration's ESEA waiver policy. The waivers created uncertainty for state and district education leaders. There was wide variation in how states responded, but many eschewed making changes to school accountability systems that were necessary because of the antiquated NCLB law (Polikoff et al. 2014).

The results from the mediation analysis suggest that the arrival of a foreign threat produces a shock. After first addressing the foreign threat, an issue spillover occurs when congressional attention shifts from national security to education. In the main model, the inclusion of education rising onto the congressional agenda partially mediated the relationship between troop changes and passage of an education reform.

A limitation of this study is the lack of measures that captures information about education systems besides SAT scores. Congress may focus on other education outcomes (e.g., attainment, job training). Additionally, there are unobserved components of state license and capacity. For example, human capital in state education agencies is integral to capacity (Manna 2006). There is a paucity of data available about state education agencies. Data on state education agency staff were available for 9 years during the period of study (Brown et al. 2011; NCES 1972). For those years the correlation between federal law passage and SEA staff was strong ($r = 0.4$). However, because so little data were available, this relationship is merely descriptive. Manna (2006) also described several unmeasurable forms of license, such as the frames policy entrepreneurs used to convince Congresspeople and the track record of past education policies. Additionally, state education revenues have increased over

time and are very strongly correlated with the linear time trend. The resulting collinearity obscures the statistical significance of this form of political capacity. Similarly, differences between House and Senate policy preferences were also significant predictors of gridlock (Binder 2014), but there were not enough votes on education issues to create this measure. Additionally, the President's policy preferences and leadership matter. Education was a personal cause for President Johnson, who prioritized passing ESEA after the assassination of President Kennedy (Davies 2007). President George W. Bush campaigned on education reform and chose to expend political capital pressuring congressional leaders (Debray 2006). Another issue is the rare cases when Congress passes education policies into law without the issue rising onto the agenda. It seems plausible that off-agenda passage occurs due to overwhelming political support or the non-controversial nature of a policy. But, it's not possible to know for certain because the governing agenda is not a directly observable construct. Finally, this design doesn't account for the effect of non-violent foreign conflicts like the Soviet launch of *Sputnik*, which in part led to the passage of the NDEA (Loss 2012; Davies 2007). It is difficult to measure existential foreign threats, but the omission of this variable likely biases the results. Because previous research has found these threats helped induce education reform it remains possible that the results here understate the true size of the effect.

A question that remains unanswered by these analyses are the factors explaining the passage of major education reform. Historically important wars in Vietnam and Afghanistan preceded the passage of innovative federal education laws (e.g., ESEA, NCLB). One possible explanation is very large shocks increase the likelihood that policymakers will consider innovative solutions. Future studies could examine if the size of the shock is correlated with choosing new policy alternatives.

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Figure 1. Changes in Deployed Troops over Time

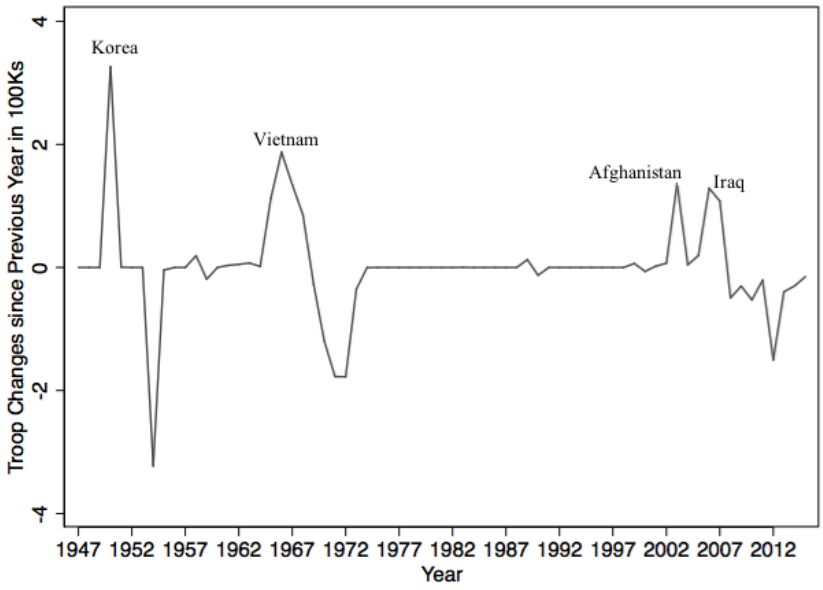


Table 1. Descriptive Statistics

Variable Name	Mean	SD	Min	Max	N
Education on Agenda	0.39	0.49	0	1	69
Education Law Passed	0.30	0.46	0	1	69
Troop Difference	0.00	0.81	-3.23	3.26	69
National Security Issues	0.00	1.00	-1.36	3.38	69
Education Governors	0.23	0.43	0	1	69
State Education Revenues	10.38	7.01	0.92	22.61	69
Education MIP	1.86	2.30	-0.04	10.07	69
SAT Composite	926.13	31.25	890	980	69
Control House	0.70	0.46	0	1	69
Control Senate	0.68	0.47	0	1	69
President	0.49	0.50	0	1	69
Polarization	62.38	19.31	34.25	103.8	69
Congressional Ideology	36.22	8.36	24.1	50.73	69
Hearing Days Lagged	34.74	22.15	3	106	68

Note: Education on Agenda indicates 4 or more New York Times editorials were written about an education issue in a year. Education Law Passed indicates that at least one education law was passed in a year. Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. Education Governors=1 if the number of education governors exceed 24 and is 0 otherwise. State education revenues in tens of billions of dollars. Education MIP is the percentage of people who identified education as the issue most important to them on the annual Gallup survey. SAT Composite takes the average of the converted math and verbal scores that are recentered from the original scale. SAT was imputed for 4 years in which scores were not available. Control of House, Control Senate, or President were estimated using binary variables where 1 indicated Democratic party control and 0 indicated Republican control. Polarization is average of the average DW-Nominate scores for the House and Senate. Ideology is the mean of the DW-Nominate Score (First Dimension) in a Congressional session. Hearing days lagged is the number of days in the previous years that Congress held a hearing on education issues.

Table 2. Means Conditional on Presence on Agenda and Law Passage

Variable	**Education Off Agenda**	**Education on Agenda**
Education Law Passed	0.17	0.52***
Troop Difference	-0.23	0.37**
Variable	**No Education Law Passed**	**Education Law Passed**
Education on Agenda	0.27	0.67**
Troop Difference	-0.09	0.22

Note: Significance tests based on a t-test comparing when education was on the agenda to when it was not and when education laws were passed to when they were not. Education on Agenda indicates 4 or more New York Times editorials were written about an education issue in a year. Education Law Passed indicates that at least one education law was passed in a year. Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. † $p<0.1$ * $p<0.05$ ** $p<0.01$ *** $p<0.001$.

Table 3. Linear Probability Models: Education Agenda on Troop Changes

	(1)	(2)	(3)	(4)
Troop Differences	0.221***	0.191***	0.198***	0.164***
	(0.04)	(0.03)	(0.06)	(0.04)
National Security Issues	0.034	-0.090	0.016	-0.079
	(0.06)	(0.06)	(0.07)	(0.07)
Education Governors		0.534†		0.586
		(0.31)		(0.45)
State Education Revenues		0.061		0.149*
		(0.07)		(0.06)
Education MIP		-0.037		-0.039
		(0.03)		(0.05)
SAT Composite		0.004		0.003
		(0.00)		(0.01)
Control House			0.390	0.474*
			(0.25)	(0.18)
Control Senate			-0.092	-0.184
			(0.21)	(0.14)
President			-0.253	-0.325†
			(0.18)	(0.18)
Polarization			0.050**	0.016
			(0.02)	(0.02)
Congressional Ideology			-0.022	-0.052*
			(0.02)	(0.02)
Hearing Days Lagged			0.001	0.003
			(0.00)	(0.00)
Linear Year Trend	-0.0001	-0.025	-0.035*	-0.049
	(0.00)	(0.02)	(0.02)	(0.04)
Observations	69	69	68	68
R^2	0.14	0.36	0.33	0.52
F	9.81	14.78	4.78	13.41

Note: Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. Education Governors=1 if the number of education governors exceed 24 and is 0 otherwise. State education revenues in tens of billions of dollars. Education MIP is the percentage of people who identified education as the issue most important to them on the annual Gallup survey. SAT Composite takes the average of the converted math and verbal scores that are recentered from the original scale. SAT was imputed for 4 years in which scores were not available. Control of House, Control Senate, or President were estimated using binary variables where 1 indicated Democratic party control and 0 indicated Republican control. Polarization is average of the average DW-Nominate scores for the House and Senate. Ideology is the mean of the DW-Nominate Score (First Dimension) in a Congressional session. Hearing days lagged is the number of days in the previous years that Congress held a hearing on education issues. Standard errors are robust to heteroskedasticity. † $p<0.1$ * $p<0.05$ ** $p<0.01$ *** $p<0.001$.

Table 4. Linear Probability Models: Education Law Passage on Troop Changes

	(1)	(2)	(3)	(4)
Troop Differences	0.096*	0.104*	0.126*	0.119*
	(0.05)	(0.05)	(0.05)	(0.05)
National Security Issues	-0.001	0.012	-0.037	-0.025
	(0.07)	(0.09)	(0.08)	(0.09)
Education Governors		0.218		0.281
		(0.32)		(0.38)
State Education Revenues		-0.045		-0.055
		(0.06)		(0.07)
Education MIP		0.023		0.065
		(0.03)		(0.04)
SAT Composite		-0.003		-0.001
		(0.00)		(0.01)
Control House			-0.356*	-0.254
			(0.16)	(0.18)
Control Senate			0.554***	0.589**
			(0.15)	(0.17)
President			-0.018	0.028
			(0.18)	(0.20)
Polarization			-0.017	-0.022
			(0.02)	(0.03)
Congressional Ideology			0.021	0.031
			(0.02)	(0.02)
Hearing Days Lagged			0.001	-0.0001
			(0.0001)	(0.0001)
Linear Year Trend	-0.004	0.003	0.002	0.014
	(0.00)	(0.02)	(0.02)	(0.04)
Observations	69	69	68	68
R^2	0.06	0.08	0.20	0.23
F	2.44	1.40	2.65	2.36

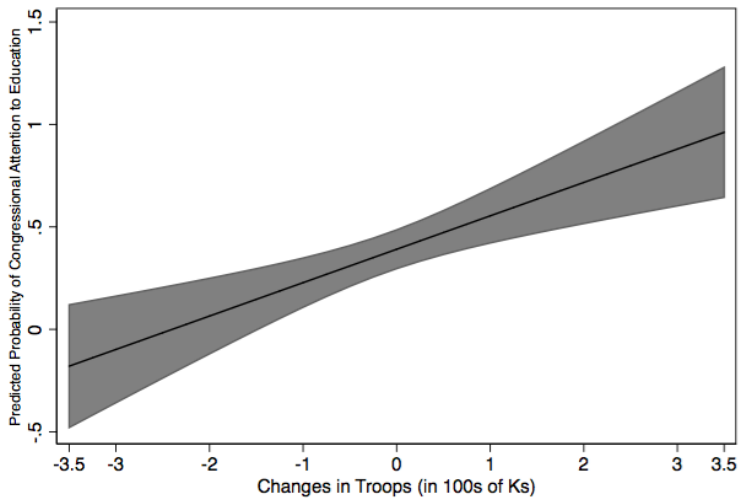
Note: Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. Education Governors=1 if the number of education governors exceed 24 and is 0 otherwise. State education revenues in tens of billions of dollars. Education MIP is the percentage of people who identified education as the issue most important to them on the annual Gallup survey. SAT Composite takes the average of the converted math and verbal scores that are recentered from the original scale. SAT was imputed for 4 years in which scores were not available. Control of House, Control Senate, or President were estimated using binary variables where 1 indicated Democratic party control and 0 indicated Republican control. Polarization is average of the average DW-Nominate scores for the House and Senate. Ideology is the mean of the DW-Nominate Score (First Dimension) in a Congressional session. Hearing days lagged is the number of days in the previous years that Congress held a hearing on education issues. Standard errors are robust to heteroskedasticity. † p<0.1 * p<0.05 ** p<0.01 *** p<0.001.

Table 5. Linear Probability Models: Mediation Analysis

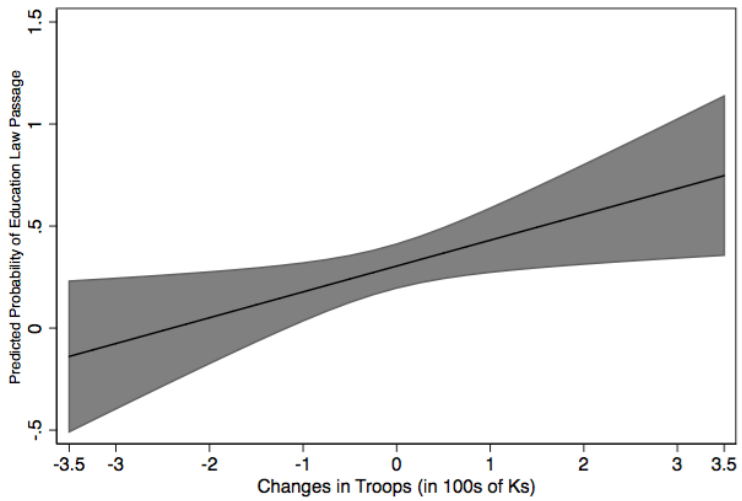
	(1)	(2)	(3)	(4)
Dependent Variable	Law Passed	On Agenda	Law Passed	Law Passed
Education on Agenda			0.581***	0.562***
			(0.13)	(0.14)
Troop Differences	0.119*	0.164***		0.027
	(0.05)	(0.04)		(0.06)
National Security Issues	-0.025	-0.079	0.021	0.019
	(0.09)	(0.07)	(0.09)	(0.09)
Education Governors	0.281	0.586	-0.062	-0.048
	(0.38)	(0.45)	(0.24)	(0.24)
State Education Revenues	-0.055	0.149*	-0.138*	-0.139*
	(0.07)	(0.06)	(0.06)	(0.06)
Education MIP	0.065	-0.039	0.088*	0.087*
	(0.04)	(0.05)	(0.03)	(0.04)
SAT Composite	-0.001	0.003	-0.003	-0.003
	(0.01)	(0.01)	(0.00)	(0.00)
Control House	-0.254	0.474*	-0.509**	-0.521**
	(0.18)	(0.18)	(0.16)	(0.17)
Control Senate	0.589**	-0.184	0.685***	0.692***
	(0.17)	(0.14)	(0.16)	(0.16)
President	0.028	-0.325†	0.227	0.211
	(0.20)	(0.18)	(0.16)	(0.17)
Polarization	-0.022	0.016	-0.031	-0.031
	(0.03)	(0.02)	(0.02)	(0.02)
Congressional Ideology	0.031	-0.052*	0.061**	0.060**
	(0.02)	(0.02)	(0.02)	(0.02)
Hearing Days Lagged	-0.000	0.003	-0.002	-0.002
	(0.00)	(0.00)	(0.00)	(0.00)
Linear Year Trend	0.014	-0.049	0.040	0.041
	(0.04)	(0.04)	(0.03)	(0.03)
Observations	68	68	68	68
R^2	0.23	0.52	0.40	0.40
F	2.36	13.41	5.08	4.76

Note: Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. Education Governors=1 if the number of education governors exceed 24 and is 0 otherwise. State education revenues in tens of billions of dollars. Education MIP is the percentage of people who identified education as the issue most important to them on the annual Gallup survey. SAT Composite takes the average of the converted math and verbal scores that are recentered from the original scale. SAT was imputed for 4 years in which scores were not available. Control of House, Control Senate, or President were estimated using binary variables where 1 indicated Democratic party control and 0 indicated Republican control. Polarization is average of the average DW-Nominate scores for the House and Senate. Ideology is the mean of the DW-Nominate Score (First Dimension) in a Congressional session. Hearing days lagged is the number of days in the previous years that Congress held a hearing on education issues. Standard errors are robust to heteroskedasticity. † p<0.1 * p<0.05 ** p<0.01 *** p<0.001.

Appendix Figure A1. Predicted Probability of Presence of Education on Congressional Agenda by Changes in Troop Levels



Appendix Figure A2. Predicted Probability of Education Law Passage on Congressional by Changes in Troop Levels



Appendix Table A1. Linear Probability Models: Education Agenda on Economic Covariates

	(1)	(2)	(3)
Troop Differences	0.165***	0.151***	0.164***
	(0.035)	(0.039)	(0.041)
GDP	0.00001		
	(0.0001)		
Unemployment Rate		-0.032	
		(0.047)	
Economy MIP			-0.161
			(0.523)
Covariates	X	X	X
Observations	68	68	66
R^2	0.52	0.52	0.52
F	13.12	12.46	12.76

Note: Troop difference in hundreds of thousands of troops. GDP is gross domestic product. Unemployment rate is seasonally adjusted. Unemployment rate is seasonally adjusted (U6 Rate). Economy MIP is the percentage of people who identified the economy as the issue most important to them on the annual Gallup survey. Standard errors are robust to heteroskedasticity. For a full list of covariates see Table 3. †$p < 0.1$; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Appendix Table A2. Linear Probability Models: Education Law on Economic Covariates

	(1)	(2)	(3)
Education on Agenda	0.563***	0.555***	0.540***
	(0.141)	(0.135)	(0.132)
Troop Differences	0.027	0.019	-0.002
	(0.058)	(0.062)	(0.067)
GDP	0.00001		
	(0.0001)		
Unemployment Rate		-0.026	
		(0.046)	
Economy MIP			-0.994
			(0.640)
Covariates	X	X	X
Observations	68	68	66
R^2	0.40	0.40	0.42
F	4.47	4.45	4.33

Note: Troop difference in hundreds of thousands of troops. GDP is gross domestic product. Unemployment rate is seasonally adjusted. Unemployment rate is seasonally adjusted (U6 Rate). Economy MIP is the percentage of people who identified the economy as the issue most important to them on the annual Gallup survey. Standard errors are robust to heteroskedasticity. For a full list of covariates see Table 3. †$p < 0.1$; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Appendix Table A3. Linear Probability Models: Education Agenda on Political Covariates

	(1)	(2)	(3)	(4)	(5)
Troop Differences	0.150***	0.169***	0.175***	0.171***	0.218***
	(0.036)	(0.036)	(0.035)	(0.033)	(0.042)
Presidential Speech	-0.001				
	(0.001)				
Education President		-0.067			
		(0.209)			
Election Year			-0.091		
			(0.108)		
5 years since ESEA				-0.148	
				(0.129)	
Brown (1953-1964)					0.443
					(0.399)
Equity (1965-1989)					0.122
					(0.342)
Accountability (1989-2015)					-0.096
					(0.432)
Covariates	X	X	X	X	X
Observations	68	68	68	68	68
R^2	0.53	0.52	0.50	0.50	0.52
F	12.56	12.56	12.54	13.15	19.00

Note: Troop differences are given in hundreds of thousands of troops. Presidential Speech = State of the Union (SOTU) education issue mentions. Education President = mentions education issues in at least half of their SOTUs. Election year is the dummy equal to 1 in even years. 5 Years since ESEA is a dummy variable equal to 1 if the number of years since the last reauthorization is greater than 4. The reference category for education era is the years 1947 to 1952. Standard errors are robust to heteroskedasticity. For a full list of covariates see Table 3. † p<0.1 * p<0.05 ** p<0.01 *** p<0.001.

Appendix Table A4. Linear Probability Models: Education Law on Political Covariates

	(1)	(2)	(3)	(4)	(5)
Education on Agenda	0.589***	0.552***	0.508***	0.522***	0.532***
	(0.143)	(0.135)	(0.124)	(0.133)	(0.126)
Troop Differences	0.046	0.046	0.019	0.021	0.026
	(0.059)	(0.061)	(0.059)	(0.058)	(0.063)
Presidential Speech	0.002				
	(0.001)				
Education President		-0.220			
		(0.194)			
Election Year			-0.100		
			(0.098)		
5 years since ESEA				-0.001	
				(0.179)	
Brown (1953-1964)					0.430
					(0.307)
Equity (1965-1989)					0.702*
					(0.294)
Accountability (1989-2015)					1.265*
					(0.582)
Covariates	X	X	X	X	X
Observations	68	68	68	68	68
R^2	0.42	0.42	0.39	0.38	0.44
F	4.33	5.38	5.31	5.85	4.70

Note: Troop differences are given in hundreds of thousands of troops. Presidential Speech = State of the Union (SOTU) education issue mentions. Education President = mentions education issues in at least half of their SOTUs. Election year is the dummy equal to 1 in even years. 5 Years since ESEA is a dummy variable equal to 1 if the number of years since the last reauthorization is greater than 4. The reference category for education era is the years 1947 to 1952. Standard errors are robust to heteroskedasticity. For a full list of covariates see Table 3. † p<0.1 * p<0.05 ** p<0.01 *** p<0.001.

Appendix Table A5. Ordinary Least Square: Congressional Productivity on Troop Changes

	(1)	(2)	(3)	(4)
Dependent Variable	Agenda Size	Major Laws	Hearings	Total Laws
Troop Differences	0.173	0.782	18.655	12.205
	(1.11)	(1.21)	(30.42)	(37.00)
National Security Issues	4.116***	1.870	-67.929*	1.769
	(0.93)	(1.71)	(29.30)	(31.53)
Education Governors	11.476†	5.554	-242.135	-8.120
	(5.85)	(7.68)	(229.77)	(119.01)
State Education Revenues	0.299	-1.339	94.615*	14.605
	(1.80)	(1.82)	(46.55)	(30.85)
MIP Education	-1.220	0.095	-2.836	24.160
	(0.79)	(1.05)	(20.52)	(22.32)
SAT Composite	-0.105	-0.123	-10.343**	-1.086
	(0.08)	(0.17)	(3.15)	(2.82)
Control House	1.463	8.822	127.250	117.950
	(4.66)	(5.57)	(98.00)	(120.71)
Control Senate	4.882	-0.195	49.116	-8.126
	(3.13)	(5.57)	(86.20)	(60.10)
President	2.176	0.330	-228.306*	-89.053
	(3.36)	(4.88)	(108.08)	(154.76)
Polarization	0.332	-1.089	-7.525	17.308
	(0.34)	(0.66)	(13.98)	(11.55)
Congressional Ideology	0.271	-0.306	-1.010	0.978
	(0.42)	(0.60)	(11.67)	(15.74)
Hearing Days Lagged	0.055	0.054	-2.642†	-4.590**
	(0.04)	(0.09)	(1.32)	(1.57)
Linear Year Trend	-0.466	1.427†	-27.857	-33.892†
	(0.64)	(0.76)	(23.19)	(20.20)
Observations	68	68	68	67
R^2	0.64	0.44	0.70	0.57
F	12.75	4.32	11.58	2.95

Note: Agenda size is the number of issues on the congressional agenda in a session. Major laws are the number of laws passed in a year that were on the congressional agenda. Hearings are the total number of hearings in a year. Total laws are the total number of public laws passed in a year. Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. Education Governors=1 if the number of education governors exceed 24 and is 0 otherwise. State education revenues in tens of billions of dollars. Education MIP is the percentage of people who identified education as the issue most important to them on the annual Gallup survey. SAT Composite takes the average of the converted math and verbal scores that are recentered from the original scale. SAT was imputed for 4 years in which scores were not available. Control of House, Control Senate, or President were estimated using binary variables where 1 indicated Democratic party control and 0 indicated Republican control. Polarization is average of the average DW-Nominate scores for the House and Senate. Ideology is the mean of the DW-Nominate Score (First Dimension) in a Congressional session. Hearing days lagged is the number of days in the previous years that Congress held a hearing on education issues. Standard errors are robust to heteroskedasticity. † p<0.1 * p<0.05 ** p<0.01 *** p<0.001.

Appendix Table B1. Logistic Regression: Congressional Agenda Size and Laws Passed on Troop Changes

	(1)	(2)	(3)	(4)
Dependent Variable	Law Passed	On Agenda	Law Passed	Law Passed
Education on Agenda			4.594***	4.412***
			(1.27)	(1.27)
Troop Differences	0.890*	2.049*		0.209
	(0.42)	(0.94)		(0.41)
National Security Issues	-0.076	-0.492	0.425	0.439
	(0.39)	(0.59)	(0.50)	(0.51)
Education Governors	2.933	25.478***	-0.875	-0.543
	(2.31)	(5.91)	(3.27)	(3.19)
State Education Revenues	-0.627	0.452	-1.249*	-1.285*
	(0.41)	(0.84)	(0.56)	(0.57)
Education MIP	0.524*	-0.483	0.816*	0.830*
	(0.27)	(0.44)	(0.34)	(0.35)
SAT Composite	-0.020	-0.005	-0.023	-0.023
	(0.03)	(0.03)	(0.03)	(0.03)
Control House	-1.398	18.576***	-4.065†	-4.062†
	(1.05)	(1.49)	(2.13)	(2.11)
Control Senate	3.958**	-0.432	5.901***	5.933***
	(1.24)	(1.47)	(1.56)	(1.56)
President	0.370	-2.079	2.429†	2.322†
	(0.95)	(1.51)	(1.27)	(1.29)
Polarization	-0.129	-0.002	-0.273†	-0.275†
	(0.13)	(0.19)	(0.15)	(0.15)
Congressional Ideology	0.225	-0.275	0.563*	0.555*
	(0.14)	(0.17)	(0.25)	(0.25)
Hearing Days Lagged	0.003	0.022	-0.020	-0.020
	(0.02)	(0.02)	(0.02)	(0.02)
Linear Year Trend	0.122	-0.187	0.381†	0.394†
Observations	68	68	68	68
Pseudo R^2	0.23	0.52	0.41	0.41
Wald Chi^2	18.29	630.03	34.97	34.83

Note: Troop difference in hundreds of thousands of troops. National security issues standardized to have a mean of zero. State education revenues in tens of billions of dollars. Control of House, Control Senate, or President were estimated using binary variables where 1 indicated Democratic party control and 0 indicated Republican control. Education Governors=1 if the number of education governors exceed 24 and is 0 otherwise. Education MIP is the percentage of people who identified education as the issue most important to them on the annual Gallup survey. SAT Composite takes the average of the converted math and verbal scores that are recentered from the original scale. SAT was imputed for 4 years in which scores were not available. Ideology is the mean of the DW-Nominate Score (First Dimension) in a Congressional session. Polarization is average of the average DW-Nominate scores for the House and Senate. Hearing days lagged is the number of days in the previous years that Congress held a hearing on education issues. Standard errors are robust to heteroskedasticity. † $p<0.1$ * $p<0.05$ ** $p<0.01$ *** $p<0.001$.