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This study posits that the National Defense Education Act of 1958 (NDEA) represented the culmination of nearly a century-long process through which education was linked to national defense in periods of wartime, and later retained a strategic utility for defense purposes in times of peace. That a defense rationale for federal support of public higher education achieved a staying power that outlasted moments of temporary strategic necessity is due in large part to the efforts of individuals in the education and policymaking communities who were able to envision and promote a lasting, expansive definition of education for national defense – one that would effectively marshal federal funding for decades to come.

In the latter half of the 20th century, it was precisely this definition that provided the rationale for further federal forays into public education in the United States, accumulating into a level of involvement that now feels commonplace. Despite its present predominance, however, this relationship was by no means a foregone conclusion in the early decades of the 20th century. The United States has historically been defined by its constitutional separation of federal and state powers, notably made manifest in a traditional emphasis on state control over public education. Each crossing of this boundary is driven by a conceptual shift that makes such transcendence possible. When the relationship of higher education to the federal government is viewed in this context, a question naturally arises – that of how the federal government has come to be involved in higher education, and under what rationales. A longstanding tradition of large-scale federal education legislation arising in wartime, and accompanying surges of federal investment in higher education, suggests that concerns of national defense provide a compelling rationale for federal involvement in public education at all levels, despite historical and even Constitutional considerations that urge a state, rather than a federal, approach.

The process by which education, and particularly higher education, was paired with national defense, on a conceptual and on the level of federal policy in the two decades prior to the passage of the NDEA is the focus of this study. As a window onto this process, this study has implications for our historical understanding of the experience of the higher education enterprise in wartime, and of the evolving relationship between the federal government and the nation’s colleges and universities in the interests of national defense and security.
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Introduction to the Study

Since its passage in 1958, the National Defense Education Act (NDEA) has rested on the concept that education has a direct role to play in the nation’s defense. The NDEA profoundly reworked the relationship between higher education and the federal government. It was the largest federal investment in higher education since the Morrill Act of 1862 established the nation’s present system of land grant colleges and universities. Unlike the GI Bill that immediately followed World War II, funds in the NDEA’s initial allocation went directly to institutions of education, as well as to individual students—a paradigm shift for federal lawmakers, who had, until that point, largely upheld the longstanding tradition that education was a matter best left to the states. The Act was massive, encompassing ten titles through which federal funding was funneled to all levels of the American education system. It offered a broad definition of ‘defense education’, encompassing subjects ranging from foreign languages and physics, to vocational education and international area studies. In its initial formulation, it was renewable every four years; and it has been reauthorized in some form with each federal funding cycle to the present day.

The traditional Cold War narrative attests that none of this would have been possible had the Soviet Union not successfully launched the Sputnik satellite that previous autumn. Unquestionably, the NDEA ushered in an era of unprecedented federal involvement in and support for public education that was to define the Cold War period, and aid in constructing the
concept of the “Cold War University.” It is not coincidental that it appeared less than one year after the Soviet orbiter sent scientists and lawmakers scrambling to find and fund a response, amidst a hue and cry of accusations that America had fallen behind. In this study, I challenge the conventional narrative that the NDEA was a catalyst of federal spending on education. Instead, I reposition the NDEA as the culminating point of a process that had begun years earlier.

Groundwork for the ease with which education became broadly accepted as a weapon in the nation’s defense arsenal had been laid nearly two decades before Eisenhower picked up his pen to sign the NDEA into law. Even before the bombs fell on Pearl Harbor, a rhetorical shift in the concept of education’s role in the nation’s security and defense was underway, aided by a transformative dialogue among communities of professional educators and federal policymakers. By the time the United States entered World War II, the nation’s educational system had been mobilized to respond to the crisis—a defense stance that would be drawn upon in successive conflicts thereafter, further binding the American educational system to the federal government in a way that now seems indissoluble. Although historians have recognized the cultural phenomenon of ‘national defense’ as a largely postwar development that had implications for society and for federal policy, the evolution of this concept and its application to American public education has been little examined.

The pairing of education with national defense function, on a conceptual level and, later, on the level of federal policy, is the subject of this study. Underlying the study is the question of how the federal government came to be directly involved in the funding of higher education

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institutions with a rationale of furthering national defense and security, a relationship that has impacted major federal education policy to the present day. I argue that the National Defense Education Act of 1958 represented the culmination of nearly a century-long process through which education was linked to national defense in periods of wartime, and later retained a strategic utility in times of peace. As a window onto this process, this study has implications for our historical understanding of the uses and service of higher education in wartime, and of the evolving relationship between the federal government and the nation’s colleges and universities in the interests of national defense and security. In examining the transformation of national defense education from a rhetorical vehicle to a framework for a federal policy, the study sheds light on the education policymaking process at the height of the Cold War, and in earlier conflicts.

I came to write this study in higher education from the unlikely place of Russian area studies – the successor of the Cold War Sovietology programs that had proliferated throughout the country with the support of programs like the NDEA and its critical provision of Title VI (university area studies and language centers). As a graduate student, I received legacy support from the NDEA – then part of the Higher Education Authorization – to study Uzbek, classified as a federal “critical language” (i.e., critical to national security) in the midst of the American operations in Afghanistan. After graduation I went to work in Washington, in a think tank funded by the Soviet-Eastern European Research and Training Act of 1983, a Cold War legacy that had originally been funded by the Department of Defense and was then administered by the

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3 The Title VI National Resource Centers, named for the provision of the NDEA under which they were originally funded, are a unique Cold War legacy, and represent one of the most persistent and successful features of the legislation that created them. This shift that took place in this period defined, to a great extent, the present-day relationship between government and academia, in particular the continuing role of America’s colleges and universities in the transfer of foreign policy-relevant area knowledge to the policymaking community, which is rooted in the Cold War period.
Department of State. We provided government grants to U.S. scholars to pursue policy-relevant research on the Former Soviet Union, and to make the results of this research available to policymakers and the public. In doing this work, I grew curious about the origin of the programs that had supported me, and through which I was supporting other scholars. I wondered how this often confusing and tenuous relationship between the federal government and higher education institutions, as well as individual scholars, had been built on the edifice of national defense. As I have argued in this study, it is a conceptual leap, even for those who support this federal involvement, that education is *directly* beneficial to national defense and security considerations.

In this study, I argue that the concept of national defense education is a vehicle through which major federal education legislation has been passed appears at critical moments throughout the 19th and 20th centuries, typically in wartime, culminating in the passage of the NDEA. To those scholars and policymakers who were laying the groundwork for the NDEA decades before its passage, the term certainly had meaning – but what that meaning was, and whether it was consistent across different interest groups, is less clear. Exploring the meaning of the term and concept of national defense education as it evolved in the 20th century is the work of this study. Predating the explicit use of the term was a rich symbolic legacy that had compelled educators and policymakers alike for nearly a century. This study is divided into four articles, and in the first – *National Defense Education as a Force Behind Wartime Federal Education Legislation: Scholarship and Historical Evolution* – national defense education is situated within a constellation of key concepts, events, legislation and scholarship that helps both to ground national defense education in its historical context and suggest a roadmap for following its historical evolution.
A contribution of this study to our understanding of the NDEA is that I suggest a chronology of national defense education that begins two decades before the NDEA’s passage in 1958. *National Defense Education as a Force Behind Wartime Federal Education Legislation: Scholarship and Historical Evolution* situates the concept as early as the nation’s involvement in World War I, and identifies important legislative precedents that were drawn upon by the advocates of the NDEA decades later. This article also elaborates a timeline for national defense education that divides its evolution over the course of the first half of the 20th century into three developmental periods: World War I, World War II, and the Cold War – which are utilized throughout the study. My chronology of 1939-1959 corresponds to the chronologies used by historians who have examined the ‘militarization’ of American society since the 1930s.

Historian Michael Sherry’s chronology of the ‘militarization’ of the United States runs from 1933-1961, and covers periods of “Emergence” (1933-1941); “Triumph” (1941-1945); “Consolidation” (1945-1953); and “Uneasy Balance” (1953-1961). I have followed a similar logic in positing periods of “mobilization” of American higher education, moving from Roosevelt’s first defense education legislation of 1940, to a denouement after 1943, reemerging with the Korean conflict mobilization in 1950, and culminating in the passage of the NDEA in 1958.

I argue that World War I loomed large in the memory of the education community at the outset of World War II, and that the education community applied important lessons learned during that earlier conflict in their advocacy for federal education policy during World War II. World War II, I argue, triggered an expanded national role for higher education, and harnessed the nation’s campuses for wartime needs in an unprecedented way. The groundwork for major

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federal funding for higher education was laid at this time, with massive investments in the name of defense education, and even—I argue—the first instance of federal student loans. Finally, I characterize the Cold War as a period of the triumph of national defense education, when national defense education became permanent policy with the passage of the NDEA. As historian Barbara Barksdale Clowse has summarized, the Cold War period saw the Sputnik panic evolve into “an educational crisis” that then “coalesced with the long and hitherto inauspicious struggle for federal aid to education,” and culminated in law.5

The process by which education came to be paired with national defense is essential to the story of national defense education and is the primary focus of the second article of the study, The Concept of National Defense Education: Discourse and Policy Development, 1939-1959. In this article, I utilize primary source materials, including the The Phi Delta Kappan, and the Bulletin of the American Association of University Professors, and U.S. Office of Education documents and other primary sources of the period to provide an overview of the discourse surrounding national defense education in the period 1939-1959. Through an in-depth examination of the uses— and users— of this concept, this article explores the origins and uses of the concept of national defense education in the period from 1939 (which saw the earliest uses that I have been able to identify) to 1959, the first year of the NDEA’s implementation. Working backwards from the passage of the NDEA to the interwar period and earlier, I identify a rhetorical shift in the discourse of professional educators and the policymaking community that alternately mirrored and triggered the growing alignment of American public education with the aims and structures of the federal government. I assert in The Concept of National Defense Education: Discourse and Policy Development, 1939-1959 that the concept of national defense

education had nuanced meanings in the Cold War period for both the education and policymaking communities. I explore the ways in which the concept was used, and evolved, since its earliest uses in 1940.

The Concept of National Defense Education: Discourse and Policy Development, 1939-1959 builds on the chronology that I elaborated in earlier to identify four periods in education’s ‘mobilization’ for defense needs: The First Federal Mobilization of Education (1940-1943); Demobilization and an Expanded National Role: 1943-1950; Education’s Second Federal Mobilization (1950-1951): the Korean conflict; and finally, The NDEA: Education as an “Instrument of National Policy.” These mobilization periods are identified from my analysis of the contemporary discourse and are illustrated, throughout the article, with examples from the primary sources.

The third article, The American Council on Education in the War Years: Defining a Persistent Vision of National Defense Education in Action, presents a case of national defense education in action by examining the wartime activities of a preeminent national higher education advocacy association, the American Council on Education (ACE), from 1940-1945, utilizing as a primary source the ACE’s wartime journal Education for National Defense. While I had initially planned a case study approach that would include the implementation of the NDEA at the university level, as I took a close look into the available archival material* it became clear to me that the more interesting story of national defense education’s move from a conceptual vehicle to a platform for activism could be told through the ACE’s wartime experience. A key

* This process included a research visit to the University of Alabama and meeting with Wayne J. Urban (author of More Than Science and Sputnik: The National Defense Education Act of 1958, 2010); communications with the University of Chicago Special Collections staff; and archival research at the University of Washington and in the archives of the University of California. Primary source materials from these and other institutions have been used in the development of this study and are referenced throughout. Research for the case study of the ACE was undertaken at the Library of Congress.
figure bridging the continuum of conceptualization to implementation of the national defense education idea is George Zook, longtime president of the American Council on Education (ACE) and perhaps the most vocal proponent of a defense role for education from the 1920s until his death in 1951. Although Zook did not live to see the advent of large-scale federal support for education through the NDEA, his writings in the interwar and World War II periods articulate a vision of defense education that was critical to the evolution of the concept into federal policy. Under Zook’s direction, the American Council on Education was certainly the most active – and perhaps the most influential – of the organized bodies that advocated a defense role for higher education in wartime. At times, the ACE, under Zook, acted as a driver of the conceptualization of national defense education, while attempting to achieve a determinative influence in setting and implementing federal policies.

Little scholarly work has been done on the ACE, and still less has been written on the plan for the Army/Navy Specialized Training Programs at colleges and universities that the ACE sought to promote in the early days of World War II. This was a fascinating episode in the relationship between higher education and the defense agencies, and a documentary example of the civilian orientation that the education community so frequently advocated in its vision of how defense education should look. The case study in The American Council on Education in the War Years: Defining a Persistent Vision of National Defense Education in Action is an attempt to expand understanding of the ACE’s interaction with the federal government during and after World War II, focusing on the articulation of a defense role for higher education, and the actors, mechanisms, strategies and institutions that were utilized by the ACE in advancing this goal.

I argue that correlation between education’s defense role, and the evolution of federal funding for education, took place within an environment of considerable circumspection by both
the federal government and the education community. This circumspection is visible in the ACE’s wartime experience, which was at once heady, triumphant, and disappointing. The ACE had a remarkable level of engagement with federal and military decision makers, and it tested the limits of this engagement to win a number of successes for the education community before ultimately, I argue, hitting a barrier that it was never able to break through. This nuanced experience provides a case of national defense education being put into action to promote a system of reliable aid to colleges and universities and their students, equitably distributed across gender, race and creed, and intended to support a broad definition of education’s utility to defense. It was a position that the education community would take, again and again, leading to the passage of the NDEA and to subsequent federal higher education legislation. Through the ACE, particularly under the leadership of George F. Zook and Francis J. Brown, a concept of education for national defense emerged that was more than a method, or a rubric, but the logical basis for the education community’s seat at the table on key questions of national defense and the role the nation’s colleges and universities might play in America’s wartime experience.

The final article of the study, *The Race for Knowledge: The Soviet and American Education Reforms of 1958*, presents an alternative perspective on the NDEA and the years leading up to its passage by positioning it alongside a major education reform program initiated by the Soviet Union in the same year, 1958. The ‘crisis’ that followed the launch of Sputnik and caused Americans to look closely at various aspects of American society – especially the educational system – is commonly cited as a catalyst of the NDEA’s passage. However, Sputnik’s launch also spurred changes in the Soviet educational system that did not go unnoticed by American educators and policymakers. Americans and Soviets emerged from the enormity of the Second World War into a new kind of conflict – one that would demand the extended
mobilization of all sectors of national life. The Cold War was rife with indistinct boundaries and shifting requirements, all of which necessitated a flexible response from its combatants. In this uneasy environment, education was recognized, on both sides, as an essential component of the nation’s arsenal. It was the commodity that produced technological victories, fueled economic growth, and ensured a steady flow of skilled manpower. Perhaps most importantly, it was the medium through which the national ideology was fostered and sustained.

So acute was this recognition of education’s capabilities that both nations, while squaring off in the Space Race, paused for a few months in 1958 to rewrite the futures of their schools. *The Race for Knowledge: The Soviet and American Education Reforms of 1958* explores the interplay between the two reform programs, and positions them in the contexts of the societies that they impacted. In exploring this interplay, the article moves between Moscow and Washington, but offers a more detailed examination of the Soviet reform, in light of this study’s larger focus on the NDEA. The Soviet educational system and its 1958 reform did not go unnoticed by the American educational and policymaking communities, and this article explores the views of Senator Henry M. Jackson (D-WA) – a sponsor of the NDEA – who traveled to the Soviet Union in 1956 and reported back on the Soviet educational system and the Soviet Union’s political outlook on it.

The title of this study comes from an October, 1941 essay by E.S. Evenden, a professor of education at Columbia University’s Teachers College. Calling the nation’s educational system its “first line of defense” against all that the conflict in Europe threatened, Evenden warned that, like other critical defensive lines—the Maginot, the English Channel—this line could fall for lack of recognition of its strategic importance. Just two months later, with the bombing of Pearl Harbor...
Harbor, education would be thrust into a position that perhaps even Evenden could not have imagined. If to modern readers the comparison of schools to the Maginot Line seems odd, if the coupling of the ‘sword and the slide rule,’ or the building of a bomber being likened to the construction of a school strikes a discordant note, I hope that this study will help to clarify how the events of 1939-1959 made such language possible. Evenden exhorted his colleagues and countrymen to “hold that line” – and hold it the education community did to a remarkable degree. That is the story that this study aims to tell.
The Concept of National Defense Education as a Force Behind Wartime Federal Education Legislation: Scholarship and Historical Evolution

Higher education in the United States has, at various points in the history of the nation, been called upon by the state to perform functions of national utility and to further national interests. Clark Kerr dates the birth of the “federal interest” in higher education to the Northwest Ordinance of 1785, with its limited land grants to public institutions. Other scholars of education have tended to place this marker in 1862, with the passage of the first Morrill Act – a legislative milestone that has transcended, in its significance, its initial allotments of public land that gave wing to the nascent land grant university movement. The willingness of Congress in 1862 – during wartime – to overcome the traditional reticence of the federal government to directly support public education set a precedent that was drawn upon by education supporters throughout the next century. The Tenth Amendment, which leaves all matters not constitutionally assigned to the federal government to the states and the population at large, has by default created a tradition of state funding of public education and a protection against the centralization of authority over the nation’s schools. The significance of the Morrill Act, and later federal education legislation, lies in their transcendence of this traditional barrier. Allan

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Nevins has credited the land grant system, and the Morrill Act, with developing the “apparatus” that made a “connection between the national government and the academic world” possible.  

This “connection” has, historically, been a mutual affair. American higher education and the federal government have long been engaged in a symbiotic relationship in which the role of the former as “knowledge producer” has yielded the public benefits of research, expertise, and an educated citizenry, while the latter has responded with the funding – both sporadic and sustained – that has been essential to the growth and development of the nation’s public colleges and universities. The logic of federal support for higher education in the United States presupposes a public benefit, produced by higher education, that transcends regional interests. The nature of that support has, historically, been a mirror of the national priorities and needs of the time.

The ‘public good’ as the product of federal research dollars spent in higher education has at times in the 20th century been defined in terms of national defense and security and wartime, or perceived national insecurity, has at points in American history created an opportune moment for institutions of higher education to make the case for federal support. At the same time, the nation’s universities – and the educational system more broadly – present a fertile target for public officials as they cast about for a solution or even a scapegoat when the world feels unstable. From the Civil War to the Cold War, the concept of national defense education evolved as a vehicle through which major federal education legislation has been passed appears at critical moments throughout the 19th and 20th centuries, typically in wartime, culminating in the passage of the Cold War-era National Defense Education Act of 1958 (NDEA). To those

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9 Kerr, *The Uses of the University*.
scholars and policymakers who were laying the groundwork for the NDEA decades before its passage, the term “defense education” certainly had meaning – but what that meaning was, and whether it was consistent across different interest groups, is less clear. Predating the explicit use of the term in 1958 was a rich symbolic legacy that had compelled educators and policymakers alike for nearly a century.

In this study, I situate the concept of national defense education within a constellation of key concepts, events, legislation and scholarship that grounds national defense education in its historical context and offers a roadmap for following its historical evolution. I suggest a chronology of national defense education that begins two decades before the NDEA’s passage in 1958, tracing the concept as early as the nation’s involvement in World War I, and identify important legislative precedents that were drawn upon by the advocates of the NDEA decades later. A timeline for national defense education that divides its evolution, over the course of the first half of the 20th century into three developmental periods: World War I, World War II, and the Cold War – which are utilized throughout the study. My primary focal chronology of the period from 1939-1959 corresponds to the chronologies used by historians who have examined the ‘militarization’ of American society since the 1930s. Historian Michael Sherry’s chronology of the ‘militarization’ of the United States runs from 1933-1961, and covers periods of “Emergence” (1933-1941); “Triumph” (1941-1945); “Consolidation” (1945-1953); and “Uneasy Balance” (1953-1961).10 I have followed a similar logic in positing periods of “mobilization” of American higher education, moving from Roosevelt’s first defense education legislation of 1940, to a denouement after 1943, reemerging with the Korean conflict mobilization in 1950, and culminating in the passage of the NDEA in 1958.

I argue that World War I loomed large in the memory of the education community as World War II approached, and that the education community applied important lessons learned during that earlier conflict in their advocacy for federal education policy during World War II. World War II, I argue, triggered an expanded national role for higher education, and harnessed the nation’s campuses for wartime needs in an unprecedented way. The groundwork for major federal funding for higher education was laid at this time, with massive investments in the name of defense education. Finally, I characterize the Cold War as a period of the triumph of national defense education, when national defense education became permanent policy with the passage of the NDEA. As historian Barbara Barksdale Clowse has summarized, the Cold War period saw the Sputnik panic evolve into “an educational crisis” that then “coalesced with the long and hitherto inauspicious struggle for federal aid to education,” and culminated in law.11

National defense education as a concept sits at an intersection between higher education history, policy history, international relations history, and diplomatic history. In the literatures of these fields, the concept is rarely addressed directly. Occasionally, it is acknowledged as a force that reached its apex at the height of the Cold War – one that made an identifiable impact on American society at that time. In these instances, the concept is not interrogated or explained. More typically, national defense education is a vague presence in this literature. Its footprints are everywhere, but it is never clearly defined. Nor, it seems, has there been much of an attempt to do so. However, the concept was compelling enough to be a part, in the months following the launch of Sputnik, of a rare transcendence of the federal government’s traditional boundary against direct financial support of public education. I argue that 1958 was not the first instance in which this transcendence occurred; but rather, that evidence of education for national defense as

a conceptual vehicle through which major federal education legislation has been passed appears at critical moments in the 19th and 20th centuries, typically in wartime. In the contemporary era, it is a term that has lent its name to one of the most significant pieces of education legislation of the 20th century, still very much with us today.

When a Congressional aide named Stuart McClure christened the National Defense Education Act in the summer of 1958, he knew two things to be true. First, he felt that it was a “God-awful title” – one that harbored a thorny contradiction between education’s ability to both ennoble the human spirit and produce the keys to humankind’s destruction. Second, he knew that the title would work. McClure calculated that in a Congress still shaken by America’s setback in space, this particular packaging of the push for federal aid to education could succeed where several recent attempts had failed. McClure calls it an awful title, but he does not call it meaningless. By invoking the idea of national defense education, McClure was drawing upon a conceptual vehicle that had been parlayed across audiences and stakeholders since the 1930s.

In this process, the concept of national defense education acquired layers of meaning that are visible both in the discourses of these critical decades, and in the federal policies that resulted from them. Predating the explicit use of the term was a rich symbolic legacy that had compelled educators and policymakers alike for nearly a century. That this force is so present in the historical record, yet so absent from the scholarly one, is remarkable. This absence from the scholarly record necessitates a wide-angle view of the emergence of the idea of national defense education, which is the work of this study.

12 The title of the NDEA came from Stuart McClure, chief clerk to Senator Lister Hill (AL, D), who said of it: “I invented that God-awful title: the National Defense Education Act. If there were any words less compatible, really intellectually, in terms of what the purpose of education is—it’s not to defend the country; it’s to defend the mind and develop the human spirit, not to build canons and battleships. It was a horrible title, but it worked.” McClure interview cited in Wayne J. Urban, More Than Science and Sputnik: The National Defense Education Act of 1958, 95.
The Notion of Education for National Defense

Wayne Urban, who is a historian of education but situates his work on the National Defense Education Act within the history of ideas, recognizes the “notion of education for national defense” as a significant component of the American “political and educational discourses” since the early 1940s.  

A scholar of the history of the National Education Association, Urban credits that organization with coupling education with a national defense function during World War II, and ties this to the organization’s larger goal of securing sustained federal support for the education system. In Urban’s analysis, the understanding of national defense education that was encapsulated as policy in the NDEA – one focused on engineering and the sciences – represents a “limited counterinterpretation” of the much broader idea that narrowed over the course of the 1940s and 1950s.

Legacy of the New Deal

The final formulation of the NDEA unquestionably represented a more constrained level of and range of federal support for education than its boosters initially envisioned. However, the passage of the bill might alternatively be read as the triumph of a broad definition of education for national defense that had been evolving since the Progressive era. This broad definition owed much to Franklin Roosevelt’s expansive public rhetoric on the essential elements of the nation’s welfare. Filtered into America’s living rooms through Roosevelt’s radio broadcast fireside chats,

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13 Urban, More Than Science and Sputnik, 27.
14 Ibid., 27.
education for national defense had entered the national conversation by the mid 1930s. This logic underlay the executive orders through which Roosevelt began to channel funding into defense-related vocational educational programs in 1940. The significance of this precedent is absent from the literature on the NDEA, where the passage of that bill is either treated as a standalone, watershed moment, or tied to previous, unsuccessful attempts to secure funding for such causes as school construction or student aid. Although it was up to McClure to pitch the title for the evolving NDEA, Roosevelt had already done much to make the concept behind it relevant in Washington and beyond.

In his June 1938 Fireside Chat, Roosevelt spoke of a broad program of “national defense of our economic system,” including the newly-passed Social Security Act. He drew a separation between these ‘defense’ programs and the recent authorizations for armament, which he described as the “national armed defense.” Earlier in the 1930s, Roosevelt had couched his sweeping domestic measures in the language of security, perhaps reflecting his belief in the importance of a strong executive branch and also at times a reaction to opponents of his uses of executive power. In May 1940, facing the growing likelihood of U.S. involvement in the conflict in Europe, Roosevelt was still careful to avoid a view of defense limited to armaments alone,

But as this program proceeds there are several things we must continue to watch and safeguard, things which are just as important to the sound defense of a nation as physical armament itself. While our Navy and our airplanes and our guns and our ships may be our first lines of defense, it is still clear that way down at the bottom, underlying them all, giving them their strength, sustenance and power, are the spirit and morale of a free people.

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16 Ibid., May 26, 1940.
The moment in which education steps into the national defense program is in that very space of the ‘spirit and morale of a free people’ – the ultimate line of defense against totalitarianism and dictatorship, as well as a national institution with significant intellectual and physical resources to be brought to bear in winning the war. Implicit here also are Roosevelt’s fears that the environment of militarization could sweep away his transformational social reforms. In a December 1940 chat, Roosevelt assured his audience that he would “ask no one to defend a democracy which in turn would not defend everyone in the nation against want and privation.”

If, as Campbell and Jamieson have suggested in their study of presidential rhetoric, the public rhetoric of the executive as a “genre” is calculated not only to preserve and adapt the institution of the presidency but also to advance policy initiatives, perhaps Roosevelt’s ‘genre’ was precisely this sweeping view of defense – one that encompassed soldier and civilian, and freedom from fear along with freedom from want.

_Militarization of the American State_

The significance of Roosevelt’s expansive definition of national defense has been recognized by scholars examining the ‘militarization’ of the United States since the 1930s. Their work provides a productive lens through which the concept of national defense education can be analyzed. Historian Michael Sherry uses the term ‘militarization’ to describe a historical process into which the U.S. entered in the New Deal period, and uses the term broadly to denote a process by which “war and national security became consuming anxieties and provided the

17 Ibid., December 29, 1940.

memories, models, and metaphors that shaped broad areas of national life.”

Others scholars of militarization have focused on the idea that war created the modern state, arguing that the United States, with its youth and geographic insularity, came late to the process by which the “imminent threat of war produced pressures for the permanent construction of a powerful central state.”

The militarization argument suggests, in essence, that the interwar period saw the beginning of a process through which American society and the state have adapted to a permanent quasi-war time footing. This condition of ‘permanent preparedness’ – a mid-century reconfiguration of that potent World War I-era concept – gave rise to structural and ideological changes that continue to impact the present day. Historians Douglas Stuart, Michael Sherry, and Aaron Friedberg have highlighted the growth of federal security structures and the increasing power of the executive branch in this period. Sherry has argued that the use of ‘war’ as “metaphor and model,” throughout the New Deal period, helped to reconcile America’s anti-statist tradition to the increasing power of the central government. This proved useful throughout the subsequent half-century, Sherry contends, as the state made a habit of “harnessing politics and state initiatives to the imperatives and models of war.” Roosevelt’s executive orders on defense education and, later, the NDEA, could certainly be viewed as products of this process.

The history of national defense education challenges Sherry’s argument that American militarization was, on the whole, poorly defined and lacking in specific policy results. An

19 Michael S. Sherry, In the Shadow of War: The United States Since the 1930s (New Haven: Yale University Press, 1995), xi. Here Sherry is drawing upon Arthur J. Schlesinger’s notion of the “age of anxiety,” coined in his 1949 work The Vital Center. Schlesinger, a penultimate example of the activist scholar, was also responsible for the concept of a “permanent crisis” rocking Cold War American society.


21 Sherry, In the Shadow of War, 17.

22 Sherry, In the Shadow of War, 119-120.
expansion of the militarization argument into education history, an area that has heretofore remained unexamined, is a productive avenue of inquiry. Sherry’s suggestion that, thanks to the civilian-military partnerships that boomed after World War II, American militarization was “dominated by civilian elites and their values” has clear implications for the education community’s ties to the expanding defense establishment. In reinforcing this claim, Sherry points to the impact of an intriguing political ‘holdover liberalism’ on a number of social policies and military strategies. Although these social policies and military strategies remain unspecified, an example of a defense policy impact of this civilian influence might be seen in the education community’s proposal for the Army/Navy Specialized Training Programs, which reflected a civilian emphasis that was not ultimately adopted.

In a way that is consistent with other prominent historians who have written on militarization, Sherry acknowledges a place for education in this social and political phenomenon, but does not explore what this place might be. Still, his statements on education point definitively to its relevance to the militarization argument. Curiously silent on federal education policies in this period, Sherry emphasizes the role of state and local authorities in adapting public education to Cold War ideology and policies. There is certainly a local story to be told here, and scholars of civil defense curricula in elementary and secondary schools have illustrated how changing ideological expectations for education impacted schoolchildren on a

23 Ibid., 80.
24 Ibid., 160.
grassroots level. These programs represent a policy manifestation, on a local level, of the militarization ideology that was evolving nationally.

**Civil Defense**

Using an analysis of Cold War era curricula, historian JoAnne Brown has suggested that, although the 1957 launch of Sputnik was used to highlight the centrality of education to national defense, and strengthened the federal education lobby, the battle for federal funding of education began much earlier, and was waged in classrooms rather than in the sky. Brown’s suggestion centers on the concept of civil defense, which she defines as a new national defense ethos that arose in the United States after the bombing of Hiroshima, and was integrated by educators into the philosophy and practice of schooling. It was through civil defense that educators complied—rather ambivalently, argues Brown—with a national defense orientation in many aspects of school policy. In the process, they attempted to claim to an ever-increasing share, if still a small one, of the federal budget allocated for defense. Brown focuses on the 1950s, a decade which saw a spirit of cooperation between individuals and institutions of diverse political viewpoints toward the preparation of civilians for threats to the home front. Education was essential to this mission, highlighted by President Truman and others as the nation’s “first line of defense.”

Brown’s argument is situated in the historical context of a pedagogical debate between Progressives of the early 20th century (who were seen as soft on Communism), and those who

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endorsed education as an appropriate incubator of civil defense—a base from which the concept would spread throughout the nation. Brown uses articles in pedagogical journals of the time to show that civil defense instruction in schools, including bomb safety drills and the wearing of identification tags, was justified on the grounds of improving child development. Such preparation, it was argued, would give children and their parents a sense of calm amidst a sea of anxiety. Rooted in a Freudian model of childhood trauma, anxiety was to be avoided at all costs. To this end, a new, sterile vocabulary about the nuclear threat was adopted in literature directed toward children and families—one cleansed of alarmist terms. Brown supports this argument through textual citations of pamphlets, comic books, and federal publications. Her claim that this campaign served a federal purpose is warranted in part by the creation in 1951 of the Federal Civil Defense Administration, which quickly developed a symbiotic, mutually serving interaction with the nation’s schools.

Brown’s study is significant as an example of scholarship on the ways in which the national defense discourse of the Cold War period translated into education policy, just as the work of militarization historians has done for the federal security establishment. But to investigate Sherry’s provocative suggestion of a process, unfolding throughout the Cold War, by which the “sword was lashed…to the sliderule [sic]” requires movement beyond the well-traveled road of under desk drills and fallout shelters. These are, arguably, among the more visible and even theatrical results of this process. But they do not advance our understanding of the glue that bound the sword and the slide rule together. A closer examination of the concept of national defense education, situated within a broader process of national militarization, could fill a significant gap in scholarship on this period. National defense education as a concept was the

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adhesive element binding education to the nation’s defense. As a concept, it represented a foundation of logic on which programs like civil defense curricula could be based.

**The National Security Act of 1947**

Although education has entered only vaguely into the scholarship on the militarization process, other areas in which federal policies did result from this process have been explored. Of these policies, the most comprehensively examined has been the National Security Act of 1947. The National Security Act was an omnibus bill that established all of the central institutions of the American “national security bureaucracy,”28 with the exception of the Department of State. The Act created a National Military Establishment, which became the Department of Defense in 1949; granted independent status to the Air Force from the Army; gave a statutory identity to the Joint Chiefs of Staff; and established the National Security Council and the Central Intelligence Agency. The Act was largely unchanged until 1958, when President Eisenhower seized the momentum of the Sputnik crisis to propose a reform program aimed at the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, which ultimately resulted in the creation, within the Office of the Secretary of Defense, of a civilian Director of Defense Research and Engineering position.29

Douglas Stuart, a scholar of international relations history, has argued that the National Security Act rode through Congress on the strength of a ‘national security ideology’ that had

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been building since Pearl Harbor. Stuart’s study places an emphasis on Pearl Harbor as the critical turning point in America’s relationship to national security and acknowledges a prewar origin for the debates that would help to refine this evolving ideology. Pearl Harbor, Stuart argues, *established* the “concept of national security” as a standard against which “all future foreign policy decisions were to be made.”30 The argument could also be made – and Stuart’s study of the National Security Act does much to advance this line of thinking – that the new national security ideology became a basis for much of the domestic policy that was to follow in Pearl Harbor’s wake. Although the education legislation that was to result from the powerful ideologies of national defense and security in this period of the late 1930s to the end of World War II differs significantly from the National Security Act in that it did not produce lasting institutional reorganization or new federal agencies, an examination of education policies through the lens of national defense and security can give insight into the ways in which these ideologies were “articulated and institutionalized”31 by the framers of such legislation, as Stuart’s study has done.

*The National Security Ideology*

The ideology of national security, on which Stuart’s study rests, has been explored by other scholars of the militarization phenomenon – most prominently, by Daniel Yergin, writing like Stuart from the field of international relations history. Yergin characterizes ‘national security’ as a concept that developed, in the early years of the Cold War, into a foreign and

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31 Ibid., 2.
domestic policy doctrine that “both described a new relationship between the United States and the rest of the world and suggested policies to be followed in light of this perceived condition.”

Yergin’s narrative suggests that the transition from concept to doctrine occurs when an idea that may have existed for some time takes on new meaning in changing social and political contexts, and becomes the guiding principle for policy decisions made to suit what are seen as the needs of the time. The term ‘national security,’ Yergin notes, certainly predates its use in the Cold War period. But it was not until the early 1940s that the term became prominent in political discourse. Yergin traces a marked increase in the use of the term ‘national security’ after 1945, noting that whereas the term scarcely arose in a series of spring, 1944 Senate meetings on the unification of the military services, it featured strongly in these same hearings in 1945 – thanks largely to the involvement of Navy Secretary James Forrestal.

Like Stuart, Yergin bolsters his analysis with examples of the national security doctrine at work, tracing its influence in a series of influential policy decisions and reports. He situates the development of the doctrine, and the institutions that it produced, within the context of the struggle for the unification of the armed services that followed World War II. The National Security Act of 1947 again features prominently in this analysis, both for the lasting changes in America’s security infrastructure that it catalyzed, and for its exemplification of national security ideology made manifest in federal policy. Yergin adds structural support to his argument by including an analysis of the Ebertstadt Report, which appeared in September, 1945. Commissioned by James Forrestal, the study that ultimately produced the report was led by financier-turned-policy adviser Ferdinand Eberstadt. Eberstadt’s team included Naval reserve

33 Yergin, Shattered Peace, 194.
officers and civilian academics – with Harvard political scientist E. Pendleton Herring leading the latter. The report recommended a revision of the nation’s security organizations along lines better suited to America’s new status as a global superpower. In its key provisions, it outlined the program that would become the National Security Act two years later. As a “central document in the evolution of the national security state,” the Eberstadt Report advances the process, articulated by Yergin, by which national security evolved from a concept traded sparingly in pre-war political discourse to an overriding doctrine by which later policy decisions were evaluated and structured.

National Security vs. National Defense

In his study, Yergin takes the unusual step of attempting to address the relationship between ‘national security’ and ‘national defense’ as terms and as concepts. The prevailing tendency, in scholarship that touches on these themes, is to skirt a distinction between the two, and simply indicate that the concepts existed parallel to one another, often used to denote the same set of ideas. In thinking about the question for our own time, one could ask why 1958 saw the passage of the National Defense Education Act, while 1991 and the end of the Cold War brought the National Security Education Program. That Yergin does take up the question of a distinction is not to say that he comes to a set of reasoned conclusions on how the terms were used in the period under his examination. One could argue that this was not Yergin’s focus in constructing his claims; that his concern lay only in the uses of the concept of national security

34 Stuart, Creating the National Security State, 88.
35 Yergin, Shattered Peace, 213.
and its ascension into doctrine and policy. Still, to assert such power for the term begs the question of why it prevailed over others. Especially surprising is that Yergin does not take up Forrestal’s deliberate distinction between the two, although he does cite it verbatim. Speaking before the Senate in 1945, Forrestal opined that America’s “national security can only be assured on a very broad and comprehensive front,” adding that, “I am using the world ‘security’ here consistently and continuously rather than ‘defense.’” 36 Although not compelled to address the ‘why?’ question that this statement raises, Yergin does explore uses of the term ‘national security’ dating back to the 18th century. He suggests that the Cold War application of the term was rooted in the “new conventional wisdom of the post-war military establishment,” encompassing the need for an expanding intelligence system and the ability – both psychologically and materially – to flexibly mobilize for military conflict. 37

The reasoning behind Forrestal’s deliberate use of ‘national security’ over ‘national defense’ may be visible in his statement itself. Inherent to the idea of national security seems to be the sense of a “broad and comprehensive” preparatory response that Forrestal’s military reorganization proposals were meant to provide. Notions of vastness, of expansiveness, of ‘permanent preparedness’ accompany the idea of national security, in Yergin’s analysis. Yergin suggests that, in the Cold War context, ‘security’ was an action-oriented term that implied a remote enemy, and a targeted response. He juxtaposes this idea with the “somewhat passive concept of ‘self-defense,’ arguing that in the post-war environment, national security was a conception for activists and enthusiasts – calling for action across a broad range and all around the planet.” 38 The idea of defense brings with it images of a response to an act of aggression that

36 Yergin, Shattered Peace, 194.
37 Yergin, 195.
38 Yergin, 218.
is time-limited. It calls to mind a war brought to America’s once-remote shores by a faraway foreign power. Security – on the other hand – hints at a more permanent state of constant vigilance and preparation. It suggests a potential enemy that is stealthy, constant, and even omnipresent. Any speculation on the divergence of these terms, however, must leave interpretive room for the fact that ‘defense’ was – in the 1930s and again in the 1950s – also used expansively, and with a sense of permanence. Conversely, the term ‘security’ cannot be read as a Cold War-construct; it also had significance to World War I, a time when America was first emerging from its isolationism.

Emily Rosenberg, a diplomatic historian, has attempted to address the origin, uses and meanings of ‘national security’ in its Cold War context. In analyzing the historical record for “meanings” of the term, Rosenberg offers a functional definition of these meanings (“symbolic systems set within historical contexts”39) that could have applications beyond the lens of diplomatic history. Rosenberg’s chronology of the term’s usage differs from that of other scholars who have explored this question. Rosenberg characterizes the term as scarcely existent before the late 1940s.40 Later scholars, including Stuart, have offered compelling examples of strategic uses of the term in the World War I era and earlier, through the activities of such organized bodies as the National Security League. It was through the work of the National Security League after its founding in 1915, Stuart suggests, that Americans became familiar with the term ‘national security.’ The League itself had been organized with the purpose of


40 Ibid., 277.
encouraging American military preparedness, and America’s participation in World War I. At its height, the organization claimed 90,000 members.⁴¹

Rosenberg contends that the Cold War meanings of ‘national security’ have their origins in the declining fortunes of the concept of ‘national interest’ in post-war discourse.⁴² A dominant idea in American foreign policymaking from George Washington’s time in office through the 1920s, Rosenberg traces a process by which the idea of ‘national interest’ lost favor among policymakers in the postwar internationalist context, in which the pursuit of narrow national interests could be construed as a power-grabbing exercise. The concept of ‘national security’ neatly filled this gap. Free as it was from “symbolic baggage,” the concept provided a more productive avenue for articulating and realizing policy goals in the new global landscape of the Cold War. National security also had the beneficial connotation of protection of the nation that was lacking in the idea of national interest. Rosenberg does take up the question of Forrestal’s deliberate use of ‘security’ over ‘defense’ in the 1945 Senate hearings on the unification of the armed services, giving it slightly more attention than Yergin did in his own citation of the statement. In explaining Forrestal’s use of the term, Rosenberg highlights the predominance of the term ‘security’ in the New Deal’s social welfare programming, and the centrality of ‘collective security’ in the Wilsonian internationalist tradition, which Rosenberg credits with the “discursive tradition” behind the creation of the United Nations Security Council.⁴³ This sense of ‘security,’ when applied to national purposes, was used by scholars of the interwar period who advocated a steady ‘preparedness’ program over short-term mobilization for specific conflicts.

⁴¹ Stuart, 28.
⁴² Rosenberg, 278.
⁴³ Ibid., 278.
Rosenberg notes that in the 1930s, ‘national security’ was at times used as a synonym for a preparedness policy that would actively “prevent trouble” rather than passively responding to it.\footnote{Ibid., 279.} It is an intriguing idea, but a more fulsome analysis of the discourse of that period would be necessary to adequately bear it out. Scholarship by Christopher Loss (Loss 2011), Carol Gruber (Gruber 1975, and David Kennedy (Kennedy 2004) point to a ‘preparedness’ discourse that is distinct from the discourses of national security and national defense. Although firmly rooted in the World War I period, ‘preparedness’ arguments continued to make their way into the political discourse of trendsetters like Admiral Hyman Rickover and Forrestal well into the 1940s.

Interestingly, Rosenberg notes that in the Reader’s Guide’s first reference to ‘national security’ in 1945, it was cross-referenced to ‘defense.’\footnote{Ibid., 279.} For every recorded instance of deliberate distinctions between ‘defense’ and ‘security’ in the Cold War period (with Forrestal’s serving as one example), there are records of the two terms having been used interchangeably to encompass America’s complex foreign and domestic policy response to the changing geopolitical realities of the postwar era. Rosenberg does not attempt to address the distinction between the two terms beyond referencing instances in which it was highlighted at the time. Rosenberg’s argument that by the 1980s, the term ‘national security’ had come to mean all things to all people – becoming so all-encompassing as to “lose all definition.”\footnote{Rosenberg, 284.} While this may have been true by the waning years of the Cold War, the historical record seems to point toward an earlier distinction between the two terms – and, on a more meta-analytical level – between the two concepts and ultimate policy approaches that they engendered.
Cold War historian Melvyn Leffler has recognized the “rising popularity of geopolitics” in the 1930s and 1940s, which resulted in greater centralization of state power and the reorganization of the economy for wartime mobilization.\(^4^7\) Leffler’s focus is less on the idea of a ‘doctrine’ of national security that resulted in specific policy decisions than on the development of the idea as a guiding force in US global strategy as the Cold War unfolded. Leffler devotes considerable attention to the process by which ‘national security’ was defined in this period, but does not distinguish it from ‘national defense’ – nor does Leffler address the latter in his study. Highlighting key documents produced by the National Security Council, the Truman administration, and Washington-based policy think tanks, Leffler traces the evolution of America’s thinking on national security in the early years of the Cold War. In doing so, he isolates a specific usage of the term within the Truman administration by the late 1940s. This ‘geopolitical perspective’ of national security, used by high-placed civilian officials and President Truman himself, focused on America’s national security as deeply intertwined with that of other democratic nations. It was a perspective that was to have profound consequences for the alternating strategies of aggression and containment that the United States pursued in its foreign policy toward the Soviet Union throughout the Cold War conflict. In evaluating the events of the late 1930s and early 1940s, and the Roosevelt administration’s response to them, Leffler calls attention to a “fusion of geopolitical, economic, ideological, and strategic considerations” that transformed traditional American foreign policy priorities into “national security imperatives.”\(^4^8\) The rapid mobilization of education for defense purposes through the


\(^{48}\) Leffler, 24.
existing framework of massive, New Deal-era youth programming in the early 1940s fits neatly into this analytical framework.

**The Truman Commission**

A key figure tying education to the broad strategy of national security, in this period, was President Truman himself. The Commission on Higher Education, established by Truman during the summer of 1946, was charged by the president with the task of evaluating all aspects of the American higher education system for its functions within a democratic system. The Commission was led by George Zook, the ACE President and one-time U.S. Commissioner of Education who had prominently advocated a defense role for education in World War II. The resulting report, *Higher Education for American Democracy* (1947), outlines a clear strategic imperative for higher education that was to be used as a guidepost in the formulation of later education policy. An argument for the strategic value of education runs like a thread throughout the document, but is rarely remarked upon by education historians. More frequently, the report is noted for the significant attention paid to such issues as educational equity, affordability, and expanded access to higher education – all questions that had been successfully put to the test in the GI Bill, raising the intriguing possibility of a broader national application of that program’s principles.

Thelin comments upon the report’s unusual pairing of higher education with the “national interest,” which included social and international roles as well as a utility to “national defense.”

This was expressed, in the report, through an emphasis on curricular improvements in foreign

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languages and international studies – the cornerstone of the NDEA that was to appear a decade later. Roosevelt’s maxim that national safety could no longer be measured in miles on a map\(^{50}\) had found an explicit application to higher education by Truman’s time. That the security “rationale” for higher education, so notable to Thelin, appears in the Truman Commission report is not surprising when the document is evaluated within its broader political context. Rather, the document is a compelling example of the Truman administration’s ‘geopolitical perspective’ (to borrow Leffler’s term) at work in an education policy formulation.

An approach to the history of higher education that incorporates the type of elite level policymaking analysis that is common to diplomatic history offers a richer understanding of how higher education has been called upon, by the national state, to advance the national interests and welfare. The rationale of higher education’s utility to national defense and security provides a fruitful avenue for this analysis and fills a gap that currently exists in the scholarship on education history. National security as a discursive vehicle that translated into policy has been explored in the scholarship of diplomatic and international relations history, but the vehicle of national defense and its applications to education -- specifically, national defense education and the NDEA, have not been much explored. The present study contributes to this question by exploring the relationship between elite policy discourse and education policymaking in wartime that advances our understanding of education and federal policymaking both in wartime and in times of peace.

*Research in the Public Interest*

\(^{50}\) Stuart, *Creating the National Security State*, 40. Speech by Roosevelt, December 9, 1941.
The incorporation of higher education into a national security role is perhaps most apparent in the rise of contracted research after World War II. This process was based in the wartime experience of defense related research in university laboratories, which transitioned into a postwar role in the Cold War environment of ‘permanent preparedness.’ From the end of the Second World War to the end of the Cold War, roughly three-quarters of the annual government defense research budget was expended in corporate and university laboratories or in facilities owned by the government but operated by private organizations.  

Robert Hutchins coined the term “research by contract” in 1943 to define this phenomenon, which was very much at work at the University of Chicago under his leadership. Hutchins correctly foresaw, in the midst of World War II, that federally contracted research would continue to reshape American higher education institutions long after the war’s end. Although he recognized its undeniable monetary benefit to his institution, Hutchins’s own views on the federal research contract were ambivalent. Chief among his fears was a loss of intellectual autonomy on the part of university researchers –

The colleges and universities have entered a new phase in their history, the phase of education by contract. Institutions are supported to solve problems selected by the government and to train men and women chosen by the government, in fields and by methods prescribed by the government, using a staff assembled in terms of requirements laid down by the government. The institutions cannot look at the projects too closely or inquire into their fitness to carry them on. If they did, they might not get the contracts. All the questions with which colleges and universities have concerned themselves, who should teach what to whom and how, the questions of the methods of instruction, the qualifications of students and teachers, and the ends and ideals of education, these questions can no longer be decided by communities of scholars.

Aaron Friedberg has characterized university research by federal contract as a remarkably autonomous arrangement, one in which (in Friedberg’s analysis) private institutions conducted

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51 Friedberg, 326.
state-sponsored research but retained their independent status. Calling these government-funded research contracts a “distinctively American creation,” Friedberg has noted the characteristic way in which this system mobilized “private energies on a large scale for public purposes.”

Friedberg fixes the birth of the contract system at July 2, 1940, the first meeting of Roosevelt’s National Defense Research Committee, where it was decided that a significant portion of military research would be undertaken in private facilities by private citizens working under federal contract. Missing from Friedberg’s analysis of the research contract system is a discussion of whether higher education institutions can be classified as ‘private,’ opening the question of education’s public role as the basis for its responsibility to advance issues of national interest.

Sociologist Martin Trow has contributed to this question, drawing a distinction between the public and private ‘lives’ of universities. In Trow’s formulation, federal decisions affecting higher education belong to the university’s ‘public life,’ along with state and public discourse on university structure, decision-making, and finance, legislative hearings, and internal university administration. The university’s ‘private life’ occurs in its classrooms, laboratories, and offices – the nexuses of human exchange, on which knowledge production is based. Trow recognizes that the two spheres of higher education’s public and private life are not impermeable. They intersect in complex and often confusing ways, as when – in Trow’s example – legislators from outside the academic community debate issues of national science policy, which would impact the scientific research done at the university level. Extending this logic, one could also

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53 Friedberg, 327.
55 Ibid., 113.
conclude that the phenomenon of research by contract represents a distinct area of intersection between the public and private spheres of higher education. Trow cites the rapid, postwar expansion of higher education, and the costs associated with it, as contributing to an escalating level of federal scrutiny of higher education institutions on the basis of the “public interest.”\textsuperscript{56}

The recognition of this public function of higher education underpins federal support for higher education institutions, and at the same time, provides a pretext for federal intervention in the affairs of these institutions. This paradox lay at the root of Hutchins’s anxieties in 1943, as he witnessed the birth of the research university. It is also central to Friedberg’s claim that -- despite the clear potential for mismanagement of this relationship by either party -- the legacy of federally funded university research has been a remarkably successful one, according to him.

**The Role of Expertise**

A response to both viewpoints can be found in Trow’s understanding of expertise. Trow suggests that there exists a mutual recognition, by both the academic and policy communities, of the specific expertise of those within the academic community to manage the affairs of higher education institutions. Expertise, in Trow’s understanding, is a mitigating factor between the federal government and higher education – erecting a barrier between the two that protects academic autonomy. The “chief protection of the autonomy of the universities,” Trow argues, “lies in the expertise of their staff; where scholars and scientists are recognized authorities on their own subjects, no one else, inside government or out, can tell them with greater intellectual

\textsuperscript{56} Ibid., 114.
authority what to teach or how, or how to conduct research and on what problems.” In an environment of frequent outside intervention in the internal activities of the university, this mitigating factor breaks down as an effective barrier to interference. The mitigating factor of expertise has been challenged by the massive expansion of higher education and its consumption as a public good – predominant features of higher education’s postwar trajectory. Trow argues that the boundaries of this understanding have shifted in favor of external decision-makers, resulting in a heightened perception of authority in state discretion over issues that are not purely academic.

Internationalization and the National Security Rationale

A corollary methodological approach to the study of the emergence of the concept of education for national security appears in the literature on the internationalization of higher education. Internationalization, as applied to higher education, can be broadly defined as the “incorporation of international content, materials, activities and understanding into the teaching, research, and public service function of universities in an increasingly interdependent world.” Scholars of the internationalization of higher education have introduced the concept of a ‘national security rationale’ for the federal government’s post-World War II attempts to expand international education in the nation’s public schools, at all levels. International education

specialist Hans de Wit defines “rationales,” in this context, as “motivations for integrating an international component into higher education.” The National Defense Education Act, with its ten titles covering a vast area of curricular change, is frequently cited as the United States government’s broadest foray into the internationalization of public education. De Wit has advanced the idea of stakeholders as a defining factor in the rationalization and incentivization of internationalization efforts. Rationales for internationalization, according to de Wit, are “influenced and to a large extent constructed by the role and viewpoint” of various stakeholders, ranging from international, national, and local governments, the private sector, higher education institutions, and the education community. De Wit isolates four categories of internationalization ‘rationales’: political, economic, cultural/social, and academic. Within each category are subdivisions that recognize nuances and specific applications of each rationale. Subdivisions of the political rationale include foreign policy interests; technical assistance projects; goals of peace and mutual understanding; and national security. De Wit characterizes the national security rationale as dominant in American international education from the 1960s through the 1980s. Although de Wit does not focus on the NDEA specifically, he recognizes the Cold War period as a “clear example of how political rationales have set the agenda for the internationalization of higher education.”

Fellow international education scholar Nancy Ruther echoes de Wit’s emphasis on the Cold War period and offers an expanded chronology for the internationalization of higher

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60 De Wit, 84.
61 Ibid., 85-88.
62 Ibid., 86.

Ruther’s chronology misses several important advancements in international higher education in her time period of coverage (including the Soviet and East European Research and Training Act of 1983), and fails to take into account major changes in the foreign policy of the United States toward the Soviet Union that were reflected in the process of internationalization during each of her chronological foci. However, the idea that federal rationales for internationalization efforts changed dramatically with the end of the Cold War is repeated in the higher education literature on internationalization. Solbrekke & Karseth suggest that, as the Cold War trailed off, internationalization took on an increased economic emphasis, as the

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63 Ruther, Barely There, Powerfully Present.

mission of higher education moved from one of being a “public good” toward being akin to a “profit-making enterprise.” Gumport has phrased this shifting focus as one of higher education’s significance as a “social institution” giving way to an economically-driven “industry logic.” Slaughter & Leslie have also highlighted the effect of market forces on higher education in altering its traditional public commitment.

The literature on internationalization of higher education, as it pertains to education for national security, raises a set of larger issues that are pertinent to contemporary education policy. Although it is important to acknowledge the contribution of this literature, it is less relevant to the historical evolution of the concept of defense education, as utilized and applied by the education and policymaking communities in the early and mid 20th century. The major point of intersection between the approaches of historians and scholars of internationalization, on this issue, has been the National Defense Education Act. The present study moves the existing scholarship beyond the NDEA itself to advance our understanding of the process by which higher education came to be linked with national defense on a conceptual level and at the level of federal policy in the United States.

*The National Security and Garrison State*

The concepts of the ‘national security state’ and the ‘garrison state,’66 both refer to the ‘militarization’ of American society beginning in the 1930s and running roughly to 1960.

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66 The phrase ‘garrison state’ appears to have been fleshed out most fully in a 1941 study by American sociologist Harold Lasswell, who imagined a chilling post-modern scenario in which “the specialists on violence are the most powerful group in society.” Lasswell’s was an extreme – even fanciful—evaluation, and it appears that the article’s title has had more staying power than the ideas expressed within it. Harold D. Lasswell, “The Garrison State,” *American Journal of Sociology* 46, No. 4 (Jan., 1941): 455-468.
According to the militarization argument, the ‘national security state’ or ‘garrison state’ is the result of this militarization process, encompassing increased executive-branch powers, new security-related federal institutions, and large-scale federal legislation that advanced the growth of each. The two concepts share a degree of interchangeability in their historical application, although some historians have treated them as distinct. Daniel Yergin situates the ‘national security state’ in an awareness among political leaders, in the early years of the Cold War, that the nation’s survival depended on its ability to organize and mobilize for ceaseless, low-level conflict. Gone were the short-term, emergency mobilizations – and rapid demobilizations – that had characterized America’s previous wartime posture. The nation was entering a period of permanent preparedness for modern war. Yergin defines the ‘national security state’ as the “unified pattern of attitudes, policies, and institutions” by which permanent preparedness was to be achieved.67 The present study extends this argument by Yergin and others to show that the higher education community reflects, and was impacted by, the development in the 20th century of the national security state.

Other historians have focused on the state building that accompanied America’s long-term mobilization strategy. Aaron Friedberg has called for a critical reexamination of the idea that the Cold War led to a “massive federal expansion and the creation of a ‘garrison’ or ‘national security’ state,” arguing not that this idea is wrong, but that it fails to take into account “paths not taken” – instances in which further state-building plans were rejected, even in this period of growth.68 Focusing on America’s political tradition of anti-statism, from the early days of its founding, Friedberg traces a process by which ‘statist’ institutions, when they appear, were

67 Yergin, 5.
68 Friedberg, 3-4.
countermanded by the development of parallel, ‘anti-statist’ forces urging a limitation of state power. Friedberg’s analysis of this process may have a useful application to the countervailing sentiments that were often visible in the dialogue that shaped the concept of national defense education in the 1940s and 1950s. Michael Sherry has also noted this duality, beginning on the eve of World War II and persisting throughout the Cold War, reflecting the conflicting sentiments that accompanied the militarization of American society. This was a period of “[a]ffluence alongside anxiety, mobilization without war, a powerful state but persistent antistatism, acute danger and lingering safety, felt innocence and a formidable drive for power.”

Rooted as they are in their historical context, the dialogues of educators and policymakers in the decades preceding the passage of the NDEA reflect the dualities that Friedberg and Sherry suggest are consistent with those within society at large in this period.

Characteristically of scholarship on militarization, Friedberg’s argument is centered on the idea that war created the modern state. Friedberg suggests that the United States, with its youth and geographic insularity, came late to the process by which the “imminent threat of war produced pressures for the permanent construction of a powerful central state.”69 Friedberg emphasizes the role of conflict in the American state-building, tracing eight “Critical Episodes” in this process, spanning from 1776-1968. With just one exception (1776), each of these episodes saw the passage of a major piece of federal education legislation. Although Friedberg does not examine the impact of the rise of the ‘garrison state’ on education, he does acknowledge that the ‘mobilization’ of the country in the Cold War period had affected education, just as it did other aspects of American social and political life. It may be that this somewhat reluctant drive toward state centralization – to which America came late – may help to explain why, in this country,

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69 Friedberg, 3.
federal forays into the direct funding of public education tend to coincide with periods of armed conflict.

**Total War**

The concept of total war appears frequently in the primary source material related to national defense education, and may in fact have been instrumental to the rationale behind a wartime role for higher education. It is an old concept, and a broad one. Generally ascribed to the Prussian military theorist Carl von Clausewitz (1780-1831), who advanced the idea of ‘absolute war,’ total war has featured in the analyses of the 19th and 20th centuries’ major conflicts. Historian Jeremy Black has suggested that the modern notion of total war was, in large part, conditioned by the experience of World War I. Black points to that conflict as the “definition of, and thus template for, total war.”70 Hew Strachan also points to the concept as one “rarely invoked in the First World War,” but manifesting fully as a result of the conflict.71

Following in the wake of World War I was a great deal of writing that addressed the experience of the war, some with the aim of aggregating lessons learned in the hope that such a conflict might never again occur. Another published wave of German soul-searching in the form of military memoirs, written by officers, served as a forum to explore the tactical and other mistakes leading to the loss of the war. German general Erich Ludendorff used the term, and in 1935 published a book – *Der Totale Krieg* – referring to total war directly. There is an evident

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sense that, after 1914, a line had been crossed into a new type of warfare that had rewritten the rules of battle for modern life. In a 1943 address to the United States Congress, Churchill declared that “modern war is total.” By the time of its use by prominent educators in the 1940s, the term seems to have been generally understood and accepted, although no consensus definition had evolved.

In the broadest definition, war is thought to be ‘total’ when the battlefield extends – literally or metaphorically – into non-military areas of society, or into the whole of society itself. Implicit in this definition is the phenomenon of mobilization moving beyond the military itself, an ideological construct around which other social institutions (including higher education) could be mobilized. Civilians feature prominently in the expansive experience of, and definition of, total war – their participation, treatment, and mobilization. This, certainly, was a critical concept for the higher education community as it came to grips with World War II. Historian Gordon Wright, who left the University of Oregon for a 1943-44 stint at the State Department, wrote that the “battlefield, no longer limited and defined, was everywhere; it was occupied by civilians and soldiers alike.” Strachan’s definition of total war hints also at the perspective of the individual who finds him or herself within this situation, concluding that the experience of total war in the 20th century was more reliant on the willingness of the individual to subordinate himself to the demands of the state than it was on the new, mechanized resources available for war-fighting. Black agrees that mobilization was, in some part, “an attitude of mind.” The acceptance of total

72 Address to the joint Houses of Congress: May 19, 1943. Cited in Black, 10.
74 Strachan, 352.
75 Black, 8.
war as a phenomenon requiring a military mobilization of the nation’s colleges and universities, their buildings, manpower, and resources, features prominently in sources from the time.

A Chronology of National Defense Education

Abraham Flexner suggested in 1930 that the university, far from occupying a remote and hermetic position, is deeply permeable by the forces at work outside its walls. The university exists, according to Flexner, “not outside, but inside the general social fabric of a given era.” Flexner’s idea is borne out in the experience of universities in wartime, which has varied significantly across World War I, World War II, and the Cold War, reflecting the particularities of the social and political contexts in which the United States experienced these conflicts. A span of roughly four decades, leading to the NDEA, saw tremendous shifts in the way in which higher education was utilized by the federal government in a defense capacity. Also changing was the cast of characters that acted as human links between the education and policymaking communities. If, as Carol Gruber has imagined, the federal government in wartime is represented by Mars, and the academic community by Minerva, then these individuals and organizations are Mercury – carrying the message of a willingness to play a national defense role for higher education to the halls of Congress, and transmitting back federal plans for the utilization of campuses and scholars in the war effort. Despite significant variations in the response of the higher education community to the great conflicts of the 20th century, and in the individuals that articulated and enacted a role for higher education in wartime, the goals, concerns, and ideals

that motivated these groups remained remarkably consistent across temporal, political, and social contexts. Repeated with each new crisis are themes of national and institutional survival, the quest for federal funding, the promotion of a national role, the balance of institutional integrity with academic freedom, and the ideal of service to the state.

*World War I – Preparedness and Service*

To suggest, as Kerr has done, that in America’s first global conflict its universities were no more than “a source of raw recruits”\(^{78}\) is to miss a far more complex and nuanced picture of higher education’s involvement in the war effort. Ensuing scholarship has presented World War I as a crucible for a number of developments that have had a lasting impact on higher education. Thousands of new recruits, crowded into their military camps, presented an opportunity for psychologists to test the human applications of their newly ascendant field. This is a frequent theme in the education histories that touch, however briefly, on this time. Ellen Lagemann has drawn attention to the legacy of intelligence testing that emerged from this period, positioning it within the context of startling rates of semi-literacy and poor academic preparedness that compromised America’s military capacity and shocked the nation.\(^{79}\) In his recent study of the relationship between higher education and democratic citizenship, education historian Christopher Loss has characterized the years of World War I as a moment in which higher

\(^{78}\) Kerr, 37.

\(^{79}\) Ellen C. Lagemann, *An Elusive Science: The Troubling History of Education Research* (Chicago: The University of Chicago Press, 2002). Lagemann cites that approximately 30% of drafted men were declared unfit for military service, lacking the education necessary to accomplish basic tasks. One fifth of all draftees were entirely illiterate (Lagemann, 36-37).
education began to coalesce into its present “size and shape” – developing crucial bureaucratic mechanisms for student assessment and retention that persist to this day. Others have focused on the challenges to academic freedom that arose in the midst of the ‘one-hundred percent’ campaigns that sought, often violently, to cleanse the nation of all things un-American. A frequently cited example, both in contemporary journals and in later scholarship, is the University of Michigan’s notorious purge of its German department – six professors and instructors were let go, over half of the department’s total faculty. Carol Gruber devotes a significant portion of her study on higher education’s role in World War I to issues of academic freedom and the growing voice of the American Association of University Professors (AAUP).

Central to Gruber’s study is her emphasis on the “service ideal” that pervaded American society in the late 19th and early 20th centuries. This phenomenon has also been remarked upon by historian David M. Kennedy, whose cultural history of the home front in World War I provides a robust understanding of the context for the changes underway in higher education at this time. Suggesting that few words were so widely applied in the World War I era as ‘service,’ Kennedy has called the term a “rhetorical vessel” housing Americans’ varied and often contradictory responses to the conflict. Kennedy offers the intriguing idea that the discursive label of ‘service’ functioned, at times, as a conciliatory device when the state attempted to enact measures that were fraught with moral and ideological contradictions. Kennedy’s example is the moniker of Selective Service applied to the draft, and an emphasis on the “voluntary” nature of the contract. The notion of the war as unavoidable – the sense that a democratic nation had no

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82 Ibid., 154.
choice but to respond – is a frequent theme in the discourse of the time. Gruber argues that the pervasive ‘service ideal’ was the moral balm that soothed scholars who may have sensed, with foreboding, the ‘awful contradiction’ between the life of the mind and the unthinking haste to which their colleagues rallied to the flag in wartime.

That they did rally to this cause – with an ebullience that later historians have found puzzling – is an undeniable feature of the historical record. Many college and university leaders met 1917 with what Clifford Wilcox has characterized as a wave of “preparedness enthusiasm” that is amply evident in journals from the period. The notion of national ‘preparedness’ was a social and political preoccupation of the time that foreshadowed, in some ways, the discourses of national defense and security that were to define later conflicts. With this movement came a group of powerful “preparedness lobbies” that mushroomed across the country, mounting an opposition to vastly outnumbered pacifist progressives.

Christopher Loss has argued, compellingly, that greater attention should be paid to the interwar period as an incubator of the relationship between higher education and the state. However, the case could be made that Loss does not go far enough in exploring this dynamic in his analysis of World War I. It was in this period that the seeds of a national defense role for education were sown. They are visible in Teddy Roosevelt’s enthusiastic comparison of public schools with military tents as “laboratories of Americanism.” It was in the midst of the


84 Kennedy, 31. Kennedy cites the National Security League, a primarily corporate enterprise, as the most active of these preparedness lobbies, along with the American Legion. The task of the progressive pacifists was complicated by a vocal group of pro-war “pragmatists,” including John Dewey and Samuel Gompers, who saw in the war the potential for a wholesale reworking of an unjust social structure. Dewey’s opinion was to shift by the war’s end; and 1940-41 found him passionately warning his fellow scholars against the extremities of patriotic nationalism that swept through the American academy in World War I.

‘national emergency,’ as World War I was often called, that a national defense role for higher education was articulated in Congress, and resulted in the passage of the Smith-Hughes Act, which supported vocational education programs and agricultural extension stations in the nation’s land grant institutions.

America’s participation in World War I, as Carol Gruber has demonstrated, established a precedent of scholars entering national service in wartime that has traditionally been more readily ascribed to World War II. An intense desire to participate in the war effort, coupled with an undeniable level of anxiety for the survival of their institutions, led university presidents to convert their campuses into sites of intensive military training under the planning and supervision of the federal government. The Students’ Army Training Corps represents this period’s most significant legacy in building the groundwork for the defense mobilization of the nation’s campuses that would be a defining feature of the higher education community’s involvement in World War II.

**The Smith-Hughes Act**

Along with the Morrill Act of 1862 and the Hatch Act of 1887, the Smith-Hughes National Vocational Education Act of 1917 provided a vital legislative precedent for later defense education programs of the Cold War period, cited by educators and lawmakers in the lead-up to the National Defense Education Act of 1958. With the Smith-Hughes Act, a relationship between vocational education and national defense was established – one that would endure for at least the next four decades. With its apparent potential for economic benefit, vocational education in the United States had by 1917 developed a powerful lobby composed of diverse interest groups, including representatives of organized labor, the National Association of Machinists, organized
education bodies (including the National Education Association), and the U.S. Chamber of Commerce.

This coalition was able to draw upon precedents of federal funding for agricultural education to successfully secure support for vocational education at the national level. The Smith-Hughes Act (or, Vocational Education Act) of 1917, signed into law by Woodrow Wilson, represented the fulfillment of this coalition’s efforts to secure large-scale federal support for vocational education programs. In a foreshadowing of the NDEA four decades later (and the 19th century Morrill Act, which depended on Southern secession and the Civil War for the conditions of its passage) Congressional opposition to federal intervention in public education could not be overcome without the critical support of southern lawmakers. Kliebard and others have noted that the impoverishment of southern schools encouraged politicians from this region to overcome any resistance to an expansion of federal involvement in their systems of public schooling, in favor of a larger proportion of federal investment in their states. The Smith-Hughes Act was sponsored by two Georgia congressmen – Senator Hoke Smith and Representative Douglas Hughes.

The bill had in fact first been introduced in 1914, and reintroduced in 1915, with little action from Congress. Imminent military conflict was the impetus for the ultimate passage of the legislation. With America’s entry into World War I all but assured, President Wilson appealed to Congress for action – arguing that the prospect of increased industrial productivity was one the United States could ill afford to reject. Proponents of the legislation articulated an important

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86 See also Wayne J. Urban, More than Science and Sputnik. Urban chronicles the critical involvement of two Alabama members of Congress – Senator Lister Hill and Representative Carl Elliott – in the sponsorship and passage of the NDEA.

conceptual link between education and national purposes. Speaking in favor of the Smith-Hughes Act, Representative Hughes argued that,

While…our national prosperity in the past has been based largely upon the exploitation of our national resources, in the future it must be based more upon the development, through vocational education, of our national resource of human labor. In the markets of the world we compete not as individuals but as a unit against other nations as units. This makes the production of our raw material and of our productive skill and human labor a national problem and unquestionably introduces a national element into vocational education.88

Visible in this statement are the nascent forms of the skilled manpower and competitiveness arguments that would underlie American education reforms in subsequent conflicts, including the Cold War.

The Students’ Army Training Corps

The second major advancement in the relationship between higher education and the federal government to arise in World War I, the Students’ Army Training Corps (SATC), originated in the work of the War Department Committee on Education and Special Training, and was authorized in June 1918. Like many iterations of defense education – as the Smith-Hughes Act demonstrates – the SATC began as a vocational program, and expanded into general education subjects as it evolved. Following a precedent that had been set by the Morrill Act in the midst of the Civil War, drill and military tactics were a central component of the SATC, in each of its formulations. The impetus for the creation of the SATC was federal – although it rode a wave of strong and vocal support from the academic community. Like later formulations of this

dynamic, this War Department committee engaged activist scholars as advisers in the creation of
the program. Their expertise became especially vital as the program expanded to include a
general education curriculum. The SATC might itself be viewed as an ideological expansion of
the Morrill Act’s provision that land grant institutions teach military tactics and maintain a
constant, albeit problematic, relationship with the Department of War. Gruber has noted that a
core group of activist scholars had, for years, called for increased military training at their
institutions as a matter of national service. It was this impetus, Gruber suggests, that paved the
way for the program that, in effect, transformed the nation’s higher education system institutions
into an “arm of the military establishment.”

At the time of the SATC’s initial authorship, the minimum draft age was 21—an
important point for academic administrators, who feared an exodus from their campuses if this
minimum were to drop to 18. The SATC was to be formulated as a department within the Army,
with units established on college and university campuses. Male students between the ages of 18-
21 would have the opportunity to voluntarily enlist in the Corps, and would be placed on
furlough—unable to be called to active duty until they had completed their courses of study, or
reached draft age. They would undergo ten hours of military training per week in technical and
theoretical subjects, and six weeks of intensive instruction in the summer.

This plan, as originally conceptualized, was met with general approval in the higher
education community. However, significant changes were to take place in the plan of the SATC
before its brief implementation in August of 1918 when, a mere seven weeks later, the armistice
rendered it obsolete and the influenza pandemic devastated any immediate plans for a follow-up

89 Roger L. Williams, *The Origins of Federal Support for Higher Education: George W. Atherton and the Land-
90 Gruber, 219.
program. Ultimately, SATC units were established in 525 higher education institutions.  

All eligible male students over the age of 18 were voluntarily inducted into the Army through the SATC, and were instantly put on active duty. The longest a new inductee could expect to remain a student was nine months; for older students, this was reduced to three months. This provision reversed early concessions to the education community that would have allowed recruits to remain students for longer periods of time, and even to graduate. All inductees lived in barracks constructed by the colleges, and ate in a common mess hall. Weekly training consisted of nine hours of military subjects (now solely technical), and thirty-six hours of academic work. The result, Samuel Capen of the Office of Education noted decades later, was that “colleges and universities were in effect army camps.”

Writing in 1942 (in the midst of that period’s own iteration of the SATC), Capen credited the very survival of the nation’s higher education system to that World War I-era program. Incorporation into “the military arm,” Capen warned his contemporaries, “saved the colleges from virtual extinction” as they would have been emptied of students sent away for military training. Short-lived and limited as it was, the significance of the SATC lies less in what it actually accomplished than in the spirit of engagement – or institutional survival – that it embodied. The program represented the first institutional mechanism by which higher education was mobilized, by the federal government, for a defense use. Although conceptualized at the federal level, the program drew upon the education community for its development and implementation. As the predecessor to the Reserve Officer Training Corps (ROTC), established

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93 Capen, 597.
in 1920, the SATC left the lasting – and later controversial – legacy of a visible military presence on the nation’s campuses.

*World War II: An Expanded National Role*

There is broad consensus in the literature on higher education that World War II set a trajectory in motion that has reached well into the present day, redefining the ways in which America’s universities interact with the state, and pushing the boundaries of interplay between education, citizenship and democracy. Thelin has characterized the war years as the period of the “utilitarian campus” – defined by laboratories humming with activity, giving rise to the federally supported applied research model that towers over the higher education landscape today.²⁴ It was in World War II that the federal government discovered the very real defense capacities of the nation’s higher education system, channeling dollars into institutions that could produce a technical advantage to US forces on the battlefields of Europe and Asia. And as steadily as research funding came in, scholars came out – entering wartime service to the state as analysts, experts, and advisors in unprecedented numbers. The discovery of a defense utility in the social sciences gave rise to new agencies, like the Office of Strategic Services and the Office of Wartime Information, that absorbed much of the exodus from the academy at the peak of the war. The sense of this conflict as a “smart man’s war”³⁶ amplified the market value of scholarly

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²⁴ Thelin, 257.


³⁶ The term comes from a 1942 *Phi Delta Kappan* article by Ullin Leavell, who was the national president of the *Phi Delta Kappa* education fraternity at the time. In an Army headquarters camp, Leavell noticed a placard with the
expertise, and lent a prestige to the social science research that was helping American troops to navigate the exotic cultures and terrains of the global battlefront. A further consequence of this legacy of interaction in wartime was the development of a new scholarly field – interdisciplinary area studies – that saw a powerful ascendancy on American campuses in the subsequent years of the Cold War.97

Kerr calls attention to an apparent paradox that runs as a subtext through the literature on the engagement of American higher education in World War II. How could scholars reconcile the ‘life of the mind’ with a readiness to jump quickly into the service of the state in wartime? In her analysis of World War I, Gruber also explores this apparent contradiction, explaining enthusiasm with which scholars moved into the service of the state through the conceptual vehicle of that era’s ‘service ideal.’ Yet, the ample primary source material that Gruber provides from the period proves a contrary point. In the voices of these activist scholars, no internal struggle is apparent. Service to the state in wartime made sense. It was an honorable calling, and the greater anguish is visible when scholars were unable, for one reason or another, to answer this summons. The problem may lie in the lens that we are turning on this period, examining it with an awareness of the rift between academia and the defense functions of the federal government that opened most visibly in the Vietnam era. It was in the midst of the Vietnam conflict that both Kerr and Gruber were casting a backward glance on higher education’s role in earlier wars. Kerr asked, in 1963, why in 1940 the nation’s heterogeneous higher education community should have “responded with such alacrity to national needs,” why institutions rooted

in the “training of ‘gentlemen’ should have committed themselves so fully to the service of brute technology.”

That these things should come as a surprise to later generations of scholars deserves examination. Neither World War I nor World War II was without its detractors, both from within and without the education community. Voices of caution and protest were certainly raised as higher education began to align itself more closely with the federal government in wartime. However, what emerges most strongly from the historical record of this time is a uniformity of purpose in the higher education community’s commitment to a defense role for itself – one that would serve the present conflict and, significantly, be sustained through times of peace. National defense education was the conceptual vehicle through which this role was formulated and articulated. It was a compelling concept that did not emerge in a vacuum. Rather, it evolved reflexively, responding to changes in the needs of both the higher education and policymaking communities as the 20th century progressed. It is deeply reflective of its context, and it is through the lens of this context that it should be examined. This study of the relationship between higher education and the state in World War II attempts to take into account the goals and values for education that both communities were expressing at the time.

While the rise of ‘research by contract,’ and the federal research university that emerged from this development, are an undeniably compelling feature of this period, a movement away from a focus on ‘brute technology,’ to borrow Kerr’s term, allows for a more nuanced analysis of the ways in which the education community brought its resources into the service of the nation’s defense. Loss argues the traditional scholarly emphasis on ‘big science,’ and the “handful of elite institutions and experts that produced it,” has in fact obscured other significant developments in

98 Kerr, 37.
the evolving relationship of higher education to the state.\textsuperscript{99} Loss centers his argument on the mechanisms that emerged from this partnership, through which the state extended access to higher education to millions of Americans through such large-scale programs as the GI Bill. Also deserving of attention, however, are the developments in higher education during the early 1940s that expanded its public voice and national role, which are examined in this study. I draw on the literature on vocational education and the army student training corps to examine precedents for the forging of relationships between the state and higher education during wartime that moved beyond technological capacity building.

\textbf{Vocational Education and the New Deal}

There has been a tendency among scholars of education policy to focus on the GI Bill as the World War II era’s most significant piece of education legislation. Although the GI Bill cannot be overlooked as a watershed program, largely lost in this scholarly analysis has been the first piece of federal education funding legislation to emerge from this conflict. Christopher Loss has called attention to the New Deal’s college work study program as an example of how the “New Deal experience sympathetically disposed higher education’s leaders to the possibilities of still greater cooperative endeavors in World War II.”\textsuperscript{100} However, I argue instead that these programs were a framework for the earliest defense education programs of the 1940s, positing that education’s first federal defense mobilization began in 1940, and was vocational in its initial orientation. It utilized and built upon the existing youth training programs of the Civilian Conservation Corps (CCC), administered by the Office of Education. In June 1940, President

\begin{footnotesize}
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\item Loss, 1.
\item Loss, 13.
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Roosevelt signed a bill that permitted the Office of Education to authorize payments to the states for the cost of courses of “less than college grade” that provided “training for occupations essential to the national defense.”

The initial appropriation was $15,000,000, and the language of the legislation strongly stipulated that support was to be given only to training courses that contributed to “the program of national defense.” The body responsible for determining whether a training course met this requirement was the Council of National Defense, a Wilson-era construct with the unenviable task of coordinating the activities of the Secretaries of War, Navy, Interior, Agriculture, Commerce and Labor. Of particular interest to the federal government were training programs in engineering and other industrial skills that might be called upon in the event of a military mobilization.

The CCC rapidly retooled both its training programs and its social objectives in order to align both more readily with the new national defense program. The result was a revitalization of sorts for this high profile New Deal program, which had met a critical need for employment among American adults and youth in the worst years of the Depression. According to Office of Education figures, nearly 68,000 young men were enrolled in CCC defense training courses in 1941. Presciently, a director of the CCC’s education program, Howard Oxley, envisioned in

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104 Ibid., 102.
1942 a continued need for the program after the war’s end, and advised that its educational
divisions should grow in alignment with the nation’s general education curriculum.105

This program was, however, an emergency measure with a limited time horizon. It
depended, for its hasty implementation, not only on the CCC, but on an existing structural
relationship between the federal and state governments for vocational education that had been
constructed by the 1917 Smith-Hughes Vocational Education Act and the 1936 George-Deen Act
that had supplemented the former. In an important departure with these two pieces of legislation,
however, the federal government defrayed the entire cost of tuition in defense training programs.
Though limited, the defense training programs might be viewed as an early indication that
defense was one area in which the federal government was willing to transcend its traditional
limitation on full financial support for public education.

A Second Chance for Defense Education – World War II and the Army/Navy Specialized
Training Programs

The frequency with which World War I was referenced by the education community in
the lead-up to World War II is rarely remarked upon in historical scholarship, although it is a
persistent theme in the discourse of the interwar period. Education journals from this time,
including the Bulletin of the AAUP, repeat the idea that World War I represented a missed
opportunity for American higher education to play a significant role in national defense. It was
one that education leaders were determined not to let slip through their hands a second time. By
the 1940s, the education lobby was swelled by the ascendancy of organized bodies representing
the interests of the nation’s colleges and universities. Leading this group were the National

Education Association (NEA) and the American Council on Education (ACE), whose growth and gradual alignment with Washington are among the more critical developments of the interwar years. The ACE and the NEA developed to such an extent in the interwar period that, by 1941, education had gained the national voice that it had lacked in 1918. Historian Roger Williams has noted a tendency among historians of education to overlook the role of the large institutional associations in shaping education policy. This tendency may be particularly egregious with regard to federal legislation affecting education, given that institutions of higher education have traditionally looked to the large national lobbying organizations as their primary link to the federal government.

It was the American Council on Education that took the lead in advocating a defense role for the nation’s colleges and universities as the conflict in Europe edged closer to American shores. That the ACE stepped in to such a prominent role, at this time, was due largely to the efforts of its president, George F. Zook. Head of the ACE from 1934 until his retirement in 1950, Zook had served previously as president of the University of Akron, and as Commissioner of Education (for one year) under President Franklin Roosevelt. Zook spearheaded a remarkable expansion of the ACE, and was seemingly inexhaustible in his efforts to carve out a role for the higher education community in Washington, D.C.

As Poland fell to the Wehrmacht in September of 1939, and Roosevelt declared a limited state of national emergency, Zook began his campaign to thrust education into the national

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107 Williams, 6.

conversation. It was clear to Zook that “the national defense” in response to this conflict “must involve extensive preparations along both military and civilian lines.” Zook’s desire to include a civilian component in the nation’s defense programs was a continuation of a theme begun by scholars involved in the SATC in World War I – and it was one that the education community would repeat in subsequent conflicts. National defense education, in the eyes of educators, was to be a civilian effort.

With the coordination of the ACE, the nation’s leading education organizations prepared an official statement on education and “the emergency” for the National Resources Planning Board, an executive office that reported directly to President Roosevelt. Instructional materials, and a statement for teachers concerning international relations and the war, were also produced. Letters went out to one hundred prominent educators, soliciting their opinions on the implications for education of the growing international crisis. In August of 1940, Zook and his counterpart at the NEA, Executive Secretary Willard Givens, presided over a meeting of forty-nine major education associations at which the National Coordinating Committee on Education and Defense was formed. Perhaps the most remarkable product of this committee was its attempted participation in the formulation of the Army/Navy Specialized Training Programs, the World War II incarnation of the SATC.

Through the Army/Navy Specialized Training Programs, higher education was called into the service of national defense in a profound way. The programs that were to sweep through the nation’s campuses in 1942-1943 elevated higher education to a defense role that it had not previously occupied. Scholars tailored their curricula to meet the needs of soldiers preparing for the battlefront – foreshadowing a moment when these soldiers would once again fill the

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classroom, taking advantage of the GI Bill to ease their adjustment into civilian careers. University scientists and laboratories saw a level of federal patronage that was to carry them well beyond the war’s end. Certainly, the program did not conform to the vision outlined by the National Coordinating Committee on Education and Defense for a broad-reaching plan that would utilize higher education institutions in both a military and a civilian capacity. Despite its disappointments, that the education community attempted to contribute such a broad-reaching plan is, in itself, significant. The education community’s ability to maintain a vocal role in articulating a defense utility for education that transcended the conflict of World War II was an essential component of higher education’s Cold War role.

The Smart Man’s War – Scholars Mobilize in the OSS and the OWI

In 1942 the president of Phi Delta Kappa, Ullin Leavell, stepped into the headquarters office of an Army training camp and found a large placard on the wall: “This is a smart man’s war.” Early in the course of the conflict it became apparent that this was a new kind of war—one in which the ability to acquire and rapidly synthesize intelligence across a vast landscape of peoples, languages and terrains would determine the victor. The experience of the war, as historian Richard Freeland has written, accelerated a deep shift in the “social significance of knowledge” that had already been at work in American culture. With the wartime fusion of education and defense policies came a funneling of scholars into the intelligence sectors of the government and the recognition that the academic community, writ large, could be of significant

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110 Leavell, 33-34.

service to the nation’s intelligence needs. Outside of direct military involvement, there were two major channels through which scholars became engaged in the defense effort—the Office of Strategic Services (OSS), and the Office of War Information (OWI). This study will focus briefly on the largest and most influential of these organizations, the OSS. Scholars were actively recruited into both organizations, and left their mark on the ways in which intelligence was gathered, synthesized and reported. Their experience in these organizations launched some scholars into an ongoing relationship with the mechanisms of state power, as advisers in the formulation of American foreign policy. Critically, they also functioned—as Bradley Smith has speculated—as a bridge over which “academic skills could pass on to be of permanent service to American intelligence.”

Within less than two decades, this bridge would lead to the passage of the NDEA; and the ongoing recognition that education had a role to play in the nation’s defense.

The Office of Strategic Services, predecessor of the modern CIA, was originally convened as the Office of the Coordinator of Information on July 11, 1941. In this early incarnation, it reported directly to the President. It became the OSS less than a year later, when it was formally established by Roosevelt’s presidential order of June 13, 1942, and placed under the jurisdiction of what was to become the Joint Chiefs of Staff. The purpose of the newly formed OSS was to collect and analyze strategic information and to conduct special operations not assigned to other agencies. Nearly the entire staff of the Office’s Research and Analysis Division (R&A), roughly 1,000 people at its height, were scholars who had been pulled directly out of academia. The division was headed by Professor William Langer, an historian on war

113 Winks, 60-61.
114 According to Office of Education data, by 1943, institutions of higher education had lost 10% of their faculty, as compared with 1939-1940 figures. Henry G. Badger and Benjamin W. Frazier (USOE), “Effects of the War Upon
leave from his teaching position at Harvard. Under Langer’s direction, the objective, interdisciplinary research produced by R&A made it the first of such divisions “to demonstrate what scholarship could accomplish for an intelligence agency.”¹¹⁵

Smith has characterized R&A as an “unusually pure academic ghetto,” despite a smattering of journalists and diplomats who also frequented the department.¹¹⁶ This distinguished R&A, Smith argues, from the British intelligence agencies on which it was based, where scholars were spread throughout various branches of the intelligence network. The east coast giants of the Ivy League, particularly Harvard and Yale, were heavily represented in this division. An alumnus of R&A, George Kyte, recounted in 1946 that “the universities and colleges of the United States reduced their faculties to a minimum in order to supply the armed forces and the war agencies with needed specialists…[scholars] made up, both in numbers and in ability, the real backbone of several of our wartime intelligence staffs.”¹¹⁷

Historians and political scientists, Kyte remembered, were utilized by the OSS as political analysts, authorities on psychological warfare, interrogators, and as advisers in choosing the locations of strategic bombings.¹¹⁸ R&A remained, throughout its brief life, a small but powerful organization. It was one of a number of avenues through which scholars were engaged in the war effort. A 1945 survey by the American Political Science Review found that of 341

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¹¹⁵ Smith, 361.
¹¹⁶ Ibid., 362.
¹¹⁸ Ibid., 558.
political scientists with wartime assignments, five had served in the OSS (likely in R&A), and six had served in the OWI.\textsuperscript{119}

The analysis produced by R&A under Langer’s direction reflected an emphasis on the social sciences and a trend toward interdisciplinary collaboration that were characteristic of the Cold War period. In this light, area studies and the interdisciplinarity that is their hallmark might be viewed as an outgrowth of the new national defense demands of the era. Anthropologist John Embree wrote in 1946 that during World War II, the “knowledge of strange peoples and cultures” that is the domain of the social sciences had “suddenly acquired an A-1 priority.”\textsuperscript{120}

“We were beginning to realize,” Embree recounted, “that the war included people as well as bullets and that if we were to work out solutions of problems in human relations we had to do more than give a man a gun and tell him to use it on the enemy.”\textsuperscript{121}

Under Langer’s direction, R&A adapted the methods of social science research and the techniques of academic work to the information requirements of the wartime policy community. Emphasis was placed on neutrality, objectivity, painstaking research, and a team approach that incorporated multiple disciplines in order to provide the type of holistic situation reporting of which Embree speaks.\textsuperscript{122} Policymakers quickly acquired a taste for integrated intelligence

\textsuperscript{119} Harvey Walker, “Political Scientists and the War,” \textit{American Political Science Review} 39, no. 3 (June 1945): 555-574.

\textsuperscript{120} John F. Embree. “Anthropology and the War.” \textit{Bulletin of the American Association of University Professors} 32, no. 3 (Autumn 1946): 485-495.

\textsuperscript{121} Ibid., 488.

The interdisciplinary range of R&A’s analysis is evident in its reports from the period. A June 1945 War Department pamphlet on “Police and Public Safety in Austria” begins with an historical overview of policing in the Austro-Hungarian Empire, which was justified by the authors under the rationale that a “knowledge of both the old Austrian and the present Germanized police in Austria is helpful” in planning the reinstatement of civil order.\textsuperscript{122} The emerging social sciences are apparent in the report’s interwoven analysis of bureaucratic structure, political tendency, and legislative context. Illustrative historical precedents—for example, a 1927 exercise in municipal rights by Vienna’s local police force—ground the narrative analysis. Primary source material was used in the research, including a range of legal statues and administrative decrees spanning two centuries. These references are footnoted and elaborated where necessary. A sociological perspective enters the analysis with the mention of Austria’s elite
analysis, which necessitated that the demands of specific disciplines yield to a multi-disciplinary perspective. This taste, once acquired, carried scholars into a greater integration with the state than had previously been seen.

The Cold War and the Triumph of National Defense Education

The conceptual bridge linking the nation’s education system with manpower and competitiveness policies – aims that had been under construction since the World War I era – reached, in the years surrounding Sputnik, a culmination point. A defense role for education – one that warranted federal support – had been broadly accepted in the education and policymaking communities. This period certainly saw a stabilization of federal funding for education, at all levels, under the rubric of national defense. With the passage of the NDEA in 1958, a broad vision of defense education was enshrined in federal policy – one that included support for foreign languages and area studies as well as mathematics and the sciences and engineering. Beyond issues of manpower and capacity, an ideological role for education emerged during the Cold War that, although not unique to that period, was remarkable for its direct tie to national defense and to the nation’s rise as a global superpower. Cold War historian John Lewis

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civil servants, many of whom, the report notes, were of Sudeten German origin and “imbued with Pan-Germanism.” Although the 27-page report closes with a set of appendices providing numerical data on the police forces and flow charts of administrative organization, the type of careful analysis presented in the body of the report is a clear departure from the maps and graphs that were the early domain of the OSS. A July, 1944 R&A report on the impending dissolution of the Nazi party offers a similarly robust analysis of the situation likely to be encountered on-the-ground by Allied troops in Germany. Both reports reflect the nature of the OSS as a feeder organization providing data and analysis to many branches of government. In its detailed presentation of possible scenarios for dissolution—and how they might appropriately be handled—the 1944 report seems to bolster Bradley Smith’s claim that toward the end of the war, pressure was growing on the R&A to make direct policy recommendations as political questions began to overshadow those of military necessity. War Department Pamphlet No. 31-222, Military Government Information Guide, “Police and Public Safety in Austria.” Prepared by the Research and Analysis Branch, Office of Strategic Services (Washington, D.C.: United States Government Printing Office, 1945).

123 Smith, 364.
Gaddis has characterized that conflict as one rooted in the basic issue of how best to organize human society. In a struggle over ideology, the role for education is clear. It is hardly surprising that, under these conditions, education was transformed into a weapon in the nation’s defense arsenal.

The Sputnik Crisis

Influential proponents of federal support for education, with Admiral Hyman Rickover foremost among these, took up the cause and elevated it to an “issue of urgent national concern.” Best known for his role in the development of nuclear propulsion in submarine warfare, Rickover used his considerable star power in the years following World War II to publicly call for increased federal funding for public education, and for an amplified curricular focus on mathematics and the sciences. Herbert Kliebard credits Rickover with repackaging the idea of curriculum for the “development of the intellect” to suit a Cold War context. For Rickover, the development of the intellect was “not so much a good in itself or for the purpose of giving the individual a way of mastering the modern world but a direct avenue to victory in the Cold War.”

These arguments rang true in a society already conditioned to see in each Soviet technological victory an indictment of the American education system. James Killian, the President of MIT and later a White House science adviser, christened this moment the “crisis of

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125 Kliebard, 267.

126 Ibid., 267.
confidence” – a title that has remained with it. The national furor over the feared shortcomings of the American education system reached its peak following the launch of the Soviet *Sputnik* satellites in the autumn of 1957, and is frequently credited with the passage of the NDEA that following year. Other scholarship, however, encourages a more nuanced view of the *Sputnik* “crisis.” Wayne Urban (2010) and Barbara Clowse (1981), the foremost scholars of the NDEA, have both suggested that, by the time of the passage of the NDEA in the summer of 1958, the crisis of confidence had already cooled. Diplomatic historian Robert Divine echoes Clowse’s view that the “public reaction” to *Sputnik* was rather flash-in-the-pan; although he is more circumspect, conceding that “the overwhelming public feeling was a deeply felt sense of national crisis.”

In contrast to Roosevelt’s expansive vision of national defense, a rubric that also included education, President Eisenhower’s ‘New Look’ national defense strategy focused on fiscal conservatism, limited mobilization, and targeted strikes. Eisenhower took a more sanguine view of the *Sputnik* “crisis” than that of his countrymen and critics. It was with reluctance that he set aside his fears of increasing the deficit to fund a large-scale federal foray into education funding. Even as he put pen to paper and signed the National Defense Education Act of 1958, Eisenhower continued to characterize the program as a limited, ‘emergency’ measure. The education lobby saw this differently – and it was its view that, in the end, prevailed.

In Conclusion

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127 Divine, xv.
128 Divine, xviii.
In April of 1958, as the various bills that would become the NDEA were being formulated and debated, the president of the University of Toledo, Asa Knowles, wrote confidently that at no time “has there been a greater appreciation of the role of education in our society”—

Education has now become an instrument of national policy, and the teacher is part and parcel of it. Congress has been asked to spend upward of a billion dollars to strengthen our elementary schools, secondary schools, and colleges… We have not reached the age of federal ‘control’ of education, but we certainly have reached a stage of federal ‘influence’ in our nation’s education. \(^{129}\)

The National Defense Education Act of 1958 added just shy of $200 million to the federal budget in 1959, and was indeed to reach a figure of one billion dollars in the first years of its implementation. \(^{130}\)

Notwithstanding Eisenhower’s reticence, it was clear to Knowles and others that this legislation was likely to be permanent, and would open the floodgates of demand for expanded federal support of education. Knowles correctly predicted a sustained presence of “federal support at all levels—still in the interest of security and national welfare.”\(^{131}\) That the NDEA is still with us, in some form, supports the assumption of Knowles and others that, once enshrined in legislation, a systematic channel of direct federal support for public education was likely to remain. In this sense the act may be seen as having paved the way for future incarnations of this support, such as the Higher Education Act, and the Elementary and Secondary Education Act.


\(^{130}\) Robert Divine, 156.

\(^{131}\) Knowles, 306.
that both followed in 1965. Although these acts reflected a shift away from Cold War necessity toward the goals of Johnson’s Great Society, they drew on an established precedent that education could, and would, be utilized as a tool in the advancement of national policy.

I have argued that without the groundwork laid by the education and policymaking communities in wartime, the lasting partnership between higher education and the federal government that persists to this day may never have been fully realized. Periods of conflict or perceived national emergency in the 19th and 20th centuries, and continuing to the present day, have produced a pattern of federal financial investments in the American system of higher education, transcending the traditional constitutional barrier to such direct support. This study contributes to the field of higher education history by highlighting this pattern of federal investment in higher education and suggesting a critical rationale underlying this support – the concept of national defense education. In so doing, this study puts flesh on the bones of a concept that has been noted by scholars in the fields of education history and education policy (Clowse, Loss, Urban), but had not yet been deeply explored. In this study, I have placed the concept of national defense education within a context of existing scholarship that includes education history and further encompasses the fields of policy history, militarization history, and diplomatic history, extending the study of the phenomenon of the ‘militarization’ of American life in the 20th century (Sherry, Friedberg) to show that – like other institutions of American society – higher education felt the impact of this development.

Scholars of militarization history have offered chronologies that divide the evolution of the phenomenon of militarization into discrete, critical stages. I have adapted this device for the development of the concept of national defense education, marking significant periods in the

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development of the concept of national defense education on the level of federal engagement in higher education and on the level of federal policy in the period from 1940 (the first uses of the concept of national defense education in federal policy) to 1958 (the moment when, with the passage of the National Defense Education Act, the concept moved into the realm of long-term federal policy in the absence of an overt conflict). Precisely because the concept of national defense education has been so little studied, I have expanded on each period in its development with key historical moments, ideas, and legislative precedents that define the period and contribute to scholarly understanding of the concept of national defense education and its evolution in the two decades preceding the passage of the NDEA. In so doing, I have pointed to some concepts that are well-studied but whose link to national defense education had not previously been made – such as the Office of Strategic Services and the ascendant role of scholarly ‘expertise’ for federal purposes following World War II. I have also made connections that have been absent from the literature surrounding national defense education, such as the use by the federal government of the existing New Deal-era vocational education infrastructure to jump-start the first federal national defense education programs of the early 1940s. The chronology of national defense education’s development that I have offered, along with its key contemporaneous ideas, programs and policies, contribute to my central argument that the concept of national defense education did not materialize from thin air in 1958 when it was appended to the watershed NDEA. Rather, it was undergirded by a series of regular legislative precedents that corresponded with periods of wartime for nearly a century prior to the NDEA’s passage – precedents that the proponents of the NDEA actively noted and drew upon. The concept of national defense education had been utilized, beginning in 1940, for major federal investments in higher education with the goal of contributing to the national defense, an
important pattern that continues to be visible in the relationship between higher education and the federal government in the 21st century. Along the way, the concept of national defense education was refined by ideas and developments that laid the groundwork for the argument, advanced by both the scholarly and the policymaking communities, that education has a vital role to play in safeguarding the nation’s defense in wartime and beyond.
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In September, 1958, President Eisenhower signed into law the National Defense Education Act, a piece of legislation that was to redefine the relationship between the federal government and public education in the United States by authorizing large-scale federal financial support to educational institutions at all levels, with the broad aim of increasing America’s competitiveness in the Cold War by promoting an educated citizenry and producing skilled manpower. The concept of national defense education did not originate with the NDEA, but had in fact been a force behind forays into federal support for higher education for two decades prior to the act’s passage. In this study, I argue that the NDEA was the culmination of a decades-long process by which education came to be paired with national defense, on a conceptual level and on the level of federal policy.

At the heart of this pairing process is the overarching question of how the federal government came to be involved in education on the grounds of defense and security—a relationship that, despite its later predominance, was by no means a foregone conclusion in the early decades of the 20th century. Working backwards from the passage of the NDEA to the interwar period and earlier, layers of the cultural processes at work in the two decades preceding the first year of the NDEA’s implementation in 1959 are peeled back to arrive at this study’s
essential unit of analysis: a rhetorical shift in the discourse of professional educators and the policymaking community that alternately mirrored and helped trigger the growing alignment of American public education with the aims and structures of the federal government. This study proceeds from the assumption that there is something to the semiotics of the phrase defense education that brought with it a host of implications and assumptions during the Cold War period, whether it fell on the ears of the education community or on those on Capitol Hill. Since 1940, the term had been parlayed across audiences and stakeholders, acquiring layers of meaning in the process. This study utilizes primary source materials from the period, including federal and Congressional reports, and journals from the community of professional educators, to explore the meanings and uses of the concept of national defense education through its evolution as a force behind federal education policy, culminating in the passage of the NDEA in 1958.

Two central journals frame the analysis of this dialogue: The Phi Delta Kappan, and the Bulletin of the American Association of University Professors. Both are professional publications, geared toward and contributed to by an audience of constituent members—teachers, administrators, professors and superintendents. Founded in 1906, the Phi Delta Kappa society of professional educators began publication of its newsletter in 1916 and, after a hiatus during the First World War, has kept it in continuous publication since 1920. Initially published quarterly, the newsletter moved to a monthly publication cycle in 1934. Its long history of near-continuous and frequent publication allows for cross-checking of earlier decades of the newsletter and for the recognition of significant changes when they arise. Each issue follows a predictable, concentrated format; notifications from the editorial staff are followed by three to four articles on a specific theme, generally contributed by members, but occasionally solicited from outside the field of education. Each issue closes with a few pages of chapter news and
updates from individual members. In the early months of World War II, these updates provide a sense of the frequency with which educators were moving into government service—often into the newly formed defense section of the Office of Education.

Also significant are the types of contributors who weigh in on various issues pertinent to the education community. The newsletter appears often to have had an administrative focus, and the deans of powerful teachers colleges, along with college presidents, are a frequent editorial presence. In the decades examined in this study, the *Phi Delta Kappan* had an elite focus on the administrators who determined what should be taught in America’s public schools, and the methods by which this question should be approached. It had a visionary orientation that encouraged conceptualization of where the field of education should go, and its place in American society. The journal also collected and published speeches related to education from outside the field, and included commentary from senior? bureaucrats, generals, scientists and concerned citizens—all of whom began to weigh more heavily into the debate surrounding federal funding for education in the years immediately following World War II.

For supplemental analysis of the period, this study has drawn on the *Bulletin of the American Association of University Professors*. Under various titles, the *Bulletin* has appeared on a continual basis since 1915. As compared with the *Phi Delta Kappan*, the *Bulletin* has maintained an explicit focus on higher education. Historically, as today, the AAUP is particularly concerned with issues of academic freedom, and these are a persistent feature of the *Bulletin*. Importantly, in the lead-up to World War II, the AAUP had a seat on a number of institutional and federal councils in which Phi Delta Kappa did not participate. The *Bulletin*, then, is this study’s window onto these early meetings that did much to define the relationship of the universities and the federal government in wartime.
Each of these journals has, since its founding, promoted and debated education’s special role in a democratic society. As a result of this orientation, this discourse has generally been framed in a broadly political context. In essence, the editors of both journals began with the premise that education has a role to play in the functioning of a democracy, and content flows outwardly from that central stance. There are pitfalls to this overt orientation, chief among them the potential for retelling the story of education for democratic citizenship – an interesting story in its own right, but not the purview of this study.\textsuperscript{133} Although it is likely that the concept of education for national defense owes much to this earlier formulation, the two differ in their chronologies, their goals, and their public policy results. Because the process by which education became fused with national defense involved a reciprocal interchange between the education and policymaking communities, the analysis of this study has been augmented by reference to the policy formulations emerging from the Office of Education in this period. Annual reports of the Office of Education from 1939-1959, and internal Office of Education documents, supplement the analysis. By 1951, Commissioner of Education Earl McGrath’s assertion that “the construction of a new schoolhouse is no less imperative, as a defense measure, than the construction of a new bombing plane”\textsuperscript{134} was largely accepted by the education community, and was in a few short years to be enshrined into federal law.

It is the goal of this study to present a window on the dialogues and events that effected this cultural shift, as well as to explore the corollary ideas and events that were critical to the development of national defense education as a concept. In so doing, I propose a chronology of

\textsuperscript{133} See, for example: Hilary J. Moss, \textit{Schooling Citizens: The Struggle for American Education in Antebellum America} (Chicago: The University of Chicago Press, 2009); Thomas Bender, \textit{Community and Social Change in America} (Baltimore: Johns Hopkins University Press, 1982).

national defense education that highlights periods of federal ‘mobilization’ of higher education through influxes of financial support that are evident in the journals and primary sources used in this study. After exploring the legacy of World War I and the expansion of a national voice for the education community in the interwar period with the growth of the American Council on Education and the National Education Association, I delineate four mobilization periods as follows: The First Federal Mobilization of Education (1940-1943); Demobilization and an Expanded National Role: 1943-1950, Education’s Second Federal Mobilization (1950-1951): the Korean conflict; and finally, The NDEA: Education as an “Instrument of National Policy.” These mobilization periods have arisen from my analysis of the contemporary discourse and are illustrated, throughout this study, with examples from the primary sources.

The Ominous Legacy of World War I

Education’s first mobilization for World War II paralleled the country’s economic mobilization for the war, which had begun prior to Germany’s invasion of Poland in September of 1939. Like the full-scale preparations occurring on the federal level, the educational mobilization that was under development by the time of Pearl Harbor built, in part, on an earlier infrastructure laid during World War I—and incorporated lessons learned from the nation’s mistakes in that conflict.\(^{135}\) The legacy of World War I loomed large for American scholars in the interwar period, who were determined not to repeat the errors of that time. These were

elaborated by E.S. Evenden, a professor of education at Columbia’s Teachers College, in an October, 1941 issue of *The Phi Delta Kappan*. Evenden’s essay is representative both of the feverish sentiment present in the journals in these weeks preceding Pearl Harbor, and for the logical flow of his argument. Likening education to a “first line of defense,” Evenden recorded his fear that, like other critical defensive lines—the Maginot, the English Channel—this line would fall for lack of recognition of its strategic importance.

The awareness that such a danger is real and imminent is not based upon a selfish professional vested interest—a desire to provide employment for teachers—but instead upon a genuine concern for the effectiveness of the services rendered by the schools, a vivid memory of what took place during and after the first World War, and an accumulating number of recent developments that indicate too clearly the probability of a historical repetition.¹³⁶

With the entry of the United States into the First World War, and the passage of the Selective Service Act in the spring of 1917, many teachers chose or were compelled into military service. In an effort to maintain a functioning school system, teaching certificates were issued to poorly qualified individuals, some of whom had not yet completed high school. This did not, in fact, differ greatly from the condition of the schools prior to the war, a time in which teacher education was inconsistent and regionally varied.¹³⁷ A 1917 study of public school teachers found that only two in five had two years of educational preparation beyond high school, and that a large percentage had no more than a high school education.¹³⁸ This was a significant blow to a profession that, since the turn of the century, had worked hard to establish its legitimacy as such. The intelligence tests and other general examinations for draftees that were coming into more widespread use at that time exposed, to the shame of the education profession, that


¹³⁸ Ibid., 36.
America was ‘a nation of sixth graders.’ Approximately 30% of drafted men were declared unfit for military service, lacking the education necessary to accomplish basic tasks. One fifth of all draftees were entirely illiterate.\textsuperscript{139} The debacle of ill-preparedness for the draft was fated to repeat itself in World War II, and became a major rallying point in the argument for federal support for education in light of its strategic importance.\textsuperscript{140} George Zook, a former Commissioner of Education and longtime president of the American Council on Education (ACE), wrote that between August and October of 1942, over 324,000 men who had previously been deferred from military service for their illiteracy were put in uniform—the Army having decided that it could little afford such a loss of manpower (the equivalent of eight combat battalions).\textsuperscript{141}

\textit{Academic Freedom in Wartime}

As early as December of 1939, John Dewey, as a past president of the AAUP, warned in an editorial to the \textit{Bulletin} that higher education must not be taken up once again in the nationalist hysteria that had gripped many campuses during World War I. Dewey foresaw threats to intellectual freedom and autonomy of university work in the shadow that was falling over Europe, and warned his colleagues to stand firm against these incursions against scholarly integrity.\textsuperscript{142} A frequently cited example of this zealotry, both in contemporary journals and in

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\textsuperscript{139} Ibid., 36-37.
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later scholarship, is the dismissal by University of Michigan of six professors and instructors—over half of its German department. The first to be dismissed, on October 12, 1917, was Dr. Carl Eggert, who was accused of expressing pro-German sentiment in his classroom and outside the university. ¹⁴³ The ejection of five more professors from the department followed in March, 1918. Although the majority of the dismissed were German in national origin, or born to immigrant parents, one professor—Warren Florer—was not of German descent, but lost his post for his vocal opposition to the war. Clifford Wilcox has argued that it was their linguistic specialization that exposed these scholars to a particularly extreme reaction from the university. “As instructors in the enemy’s language,” Wilcox writes, these men “were viewed as spies and propagandists.”¹⁴⁴ German nationals employed at the university in other departments were treated with greater leniency.

Among the reasons presented by the University of Michigan for the professors’ dismissal was a drop in German language enrollment. Indeed, foreign language enrollment in the United States fell precipitously during and after World War I, and did not entirely recover until World War II, when foreign language instruction in the United States was to undergo a reversal of fortune. German remained stigmatized throughout the interwar period, with German instruction dropping entirely out of many school and college course offerings after 1918. By 1922, instruction in German in secondary schools had not yet resumed in 21 states—despite a significant increase in secondary school enrollment in the post-war period.¹⁴⁵ German instruction


¹⁴⁴ Ibid., 62.

in these years was eclipsed by an interest in Spanish, which accompanied increasing commercial and cultural ties to Latin America. In the wake of Europe’s turmoil and economic devastation, Spanish emerged as a safer language, just as America’s southern neighbors seemed safer trading partners. Language, at this time, continued to be perceived as a potent marker of cultural affinity, one which, by 1925, was not yet safe from suspicion. In a survey analysis for the Modern Language Journal, J. Preston Hoskins reported that—

On all sides we meet with the opinion freely expressed that German is sure to come back and that the study of Spanish will prove but a temporary fad which will quickly pass as soon as the wave of hysterical feeling engendered by the War shall have subsided and public opinion shall once more consider educational problems from a sane and rational point of view.  

It is this “hysterical feeling” that Dewey and others warned the academic profession to guard its doors against in 1939, with the memory of what had occurred at the University of Michigan two decades earlier still fresh in their minds. In the second global conflict, however, foreign language expertise took on a critical role that would be recognized with federal support with the passage of the NDEA.

‘Preparedness Enthusiasm’ and the Students’ Army Training Corps

Many college and university leaders met 1918 with what Wilcox has characterized as a wave of “preparedness enthusiasm” that included a willingness to convert their campuses into sites of intensive military training under the planning and supervision of the federal government. Others complied as a matter of survival. The Students’ Army Training Corps (SATC) was conceptualized in the spring of 1918, and was authorized in June of that year. It might itself be

146 Ibid., 87.
147 Wilcox, 80.
viewed as an ideological expansion of the Morrill Act’s provision that land grant institutions teach military tactics and maintain a constant, albeit problematic, relationship with the Department of War.\textsuperscript{148}

Samuel Capen of the Office of Education recounted for the \textit{Bulletin}, in the midst of the implementation of the Army & Navy Specialized Training Programs that developed in 1942, that under the SATC “student soldiers were at all times under military discipline and control...[t]his meant that colleges and universities were in effect army camps.”\textsuperscript{149} That so explicit a parallel was drawn between the SATC and its World War II equivalent by Capen was not coincidental.

Nor is the implicit warning to the education community housed in his closing statement—

\begin{quote}
It has been said frequently in defense of the S.A.T.C. that it saved the colleges from virtual extinction. The statement is true. At the time of its establishment nothing could have saved them, except their incorporation in some fashion in the military arm. Otherwise, the lowering of the draft age to 18 would have wiped out their male population.\textsuperscript{150}
\end{quote}

Failure though it was, from an educational standpoint, the SATC is significant as the predecessor to the Reserve Officer Training Corps (ROTC), established in 1920 in land grant institutions. The memory of SATC’s limitations, and how helpless educators had been to prevent them, was resurrected in debates surrounding the formulation of the Army and Navy Specialized Training Programs in 1942.

\textbf{A National Voice: The NEA, the ACE, and George F. Zook}

\textsuperscript{148} Williams, 188-192.


\textsuperscript{150} Ibid., 597.
The growth of the National Education Association (NEA) and its sister organization, the American Council on Education (ACE), was a significant development in the education landscape during the interwar period. Roger Williams has written of the tendency, among historians of education, to overlook the role of the large institutional associations in shaping education policy.\footnote{Williams, 6.} This tendency may be particularly egregious with regard to federal legislation affecting education, given that institutions of higher education have traditionally looked to the large national lobbying organizations as their primary link to the federal government.\footnote{Cook, 19.} In the story of how education came to be coupled with national defense, the work—often cooperative—of the NEA and the ACE cannot be overlooked. These organizations, and the individuals who headed them, served as a bridge between academia and the federal government—on the basis of which defense education policy would be constructed.

Each of these organizations was, in some way, a product of the First World War, the ACE having been founded in 1918, and the NEA having undergone a major reorganization in 1917. The latter was founded in 1857, and so predates the Office of Education by a decade.\footnote{The Office of Education was originally founded as the Department of Education (but was not a cabinet level department) in 1867, and was housed within the Department of the Interior. In 1869, it had become the Office of Education, and was to become the Bureau of Education one year later. It kept this title until 1929, and occasionally appears as such in this study. It became the Office of Education once again in 1929, and in 1939 (in a significant indicator of the changing federal role of education) was transitioned by an executive reorganization plan into the Federal Security Agency. It remained within this administrative structure until 1953, when it became a division of the Department of Health, Education and Welfare. In 1979, the Department of Education became an independent administrative unit of the federal government at the Cabinet level. Richard Wayne Lykes, \textit{Higher Education and the United States Office of Education, 1867-1953} (Washington, D.C.: United States Office of Education, 1975).} The NEA took the opportunity of its 1917 transformation to align itself more closely with the war effort, establishing a headquarters in Washington, D.C., and convening a Committee on the
National Emergency in Education. As indicated by its lobbying efforts on behalf of teachers’ salaries in the interwar period, the NEA has always been made up of individual members, mostly teachers, and has also represented administrators and policymakers. The ACE, by contrast, is a coalition of member institutions, and grew initially out of a call from the Association of American Universities (AAU) for a body that would coordinate the activities of the various education associations that arose in the late 19th and early 20th centuries. Within one year of its founding in January, 1918, the ACE could count every national association of higher education associations among its membership. In 1935, as New Deal programs began to make federal representation more imperative for educators, the ACE expanded its membership to include teachers colleges, municipal school districts, and state departments of education.

A federal orientation has been integral to the ACE since its founding. Initially established by a coalition of education associations and representatives from the Bureau of Education as an emergency council to aid in providing the military with a supply of trained personnel, the early purpose of the ACE was to clarify and channel the “doctrine of military preparedness” which educators and administrators had embraced at the outbreak of the World War I. Despite the impact of the war on their campuses, communication between college and university presidents and the War Department had remained ambiguous and sporadic. The

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NB: World War I was often referred to, contemporaneously, as the National Emergency. This tendency was repeated to a certain extent in World War II.


156 Ibid., 68.
157 Ibid., 20.
158 Cook, 23.
Emergency Council on Education (which later became the ACE) had as its stated goal the placement of the “educational resources of the country more completely at the service of the National Government.” Significantly, the meeting took place in Washington, and was presided over by the Chief of the Bureau’s Division of Higher Education, Dr. Samuel Capen. Washington office space was leased for the nascent organization in the Munsey Building, where two new groups, the National Research Council (an offshoot of the National Academy of Sciences) and the Council of National Defense, were housed. An executive council of six members was constituted, and headed by the president of Carleton College. The Bureau of Education stepped away from a representative position on the council in its initial formulation, but Capen continued to play a significant ex-officio role in its activities.

It was Capen’s successor, George F. Zook, who would further solidify the relationship between the national education organizations and the federal government. Perhaps best known for his chairmanship of Truman’s landmark Commission on Higher Education, Zook (1885-1951) first entered federal service shortly after the first world war’s end. Then the 34-year old head of the Department of History, Political Science, and Economics at Pennsylvania State College, Zook first applied for Capen’s position as head of the Division of Higher Education in August of 1919, and accepted the role in January, 1920. Zook served in this capacity until 1925, returning in 1933 for a one-year stint as the Commissioner of Education. Though brief, Zook’s tenure as Commissioner was significant, coinciding as it did with the beginning of Roosevelt’s New Deal (and setting the Bureau of Education’s policy toward this program). Among the more meaningful results of Zook’s twelve months in office, both for the nation and for the

159 Lykes, 77.
160 Ibid., 108.
coming defense mobilization of education, was the creation of an educational program of the Civilian Conservation Corps (CCC), administered by the Bureau of Education. Zook resigned his position in May, 1934, but remained in WA and spent the next sixteen years as director of the ACE.

The ACE and the NEA developed to such an extent in the interwar period that, by 1941, education had gained an expansive national voice that it had lacked in 1918. It used this voice, at times, to warn of the threats to academic freedom that can accompany periods of national crisis, as Dewey had done in 1939. Ralph Himstead, then president of the AAUP, wrote in 1940 of the firing of a professor of modern languages, who had voiced to his congressional representative his opposition to the new Selective Service law then under consideration, and to express his views on the war in Europe. Himstead reminded his audience of the mass dismissal of the University of Michigan’s German department in the midst of the previous war. Having recently formed, with the cooperation of the NEA, the National Coordinating Committee on Education and Defense, Himstead’s commitment to a role for education in the coming conflict was apparent.

To assist in national defense is clearly one of the responsibilities of our educational institutions, and the Committee will, I am confident, be a useful agency in strengthening our national defense against possible aggression. There are other definite responsibilities that must not be lost sight of, among them the preservation and furtherance of the principles and procedures essential to both higher learning and democracy. Both are in danger, and apparently we shall need to protect them from some of their “protectors.”

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It is a sober note on which to end; a rare voice of caution tempered with patriotism, as one might expect from the AAUP in this period. To Himstead’s dismay, when the war crossed into American waters “there was in existence no plan for the utilization of colleges and universities.” Although there was never to be just one plan, this utilization did nevertheless take place—but on Washington’s terms.

The First Federal Mobilization of Education (1940-1943)

*Vocational Education and the National Defense Training Program: 1940-1941*

Though limited, the defense training programs might be viewed as an early indication that defense was one area in which the federal government was willing to transcend its traditional boundary regarding full financial support for public education. The editorial staff of *The Phi Delta Kappan* was quick to conflate the federal utilization of select vocational education programs, such as the southern collaboration between Alabama public schools and marine pipe fitter programs in the dry docks, with a full-scale engagement of public schools in the nation’s defense. “The public schools have swung into the defense training program with speed,” reads one heading; just shy of three weeks after Roosevelt’s authorization of the program, the newsletter reports, 30,000 men were in training in public schools across the country. And yet—that same issue reports—the Army and Navy remained reticent on whether there would be any future need for the colleges and universities in training military forces. None in the education

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163 Ibid.
community could have anticipated how rapidly the country was moving toward Pearl Harbor, and how quickly this ambiguous position of the nation’s campuses would change.

**National Defense Curricula: Aviation & Foreign Language Instruction**

Vocational education and military preparedness have been linked, by the federal government, since the passage of the first Morrill Act in 1862. The period of the Second World War saw a conceptual leap take place which extended this linkage beyond technical and vocational subjects into the liberal arts, a shift which was accompanied by an increasing recognition of the defense value of the social sciences in the global conflict. For the purposes of this study, curricular changes in aviation and foreign language education have been analyzed to provide a picture of how defense education was enacted at the local level in the early years of education’s first mobilization. The idea is, that by including both technical and classical subjects, this brief survey will provide a sense of the evolving dynamics of defense education in the early 1940s. Two primary sources have been utilized here, as a supplement to the central journals used in this study. Foreign language instruction has been analyzed through an examination of the *Modern Language Journal* for the years 1940 – 1945. Far fewer sources exist on the aviation and aeronautical engineering courses that expanded in public schools during this period. However, a thorough overview of aviation instruction in the nation’s public schools was published by the *Bulletin of the National Association of Secondary School Principals*, a publication of the NEA’s secondary education division. In its December, 1944 issue, the *Bulletin of the NASSP* also reproduced, partially or in their entirety, state plans for aviation instruction for California, Colorado, Connecticut, the District of Columbia, Illinois, New York, Pennsylvania, and Wisconsin. It is this source that informs the study.
The aviation and aeronautical curricula that appeared in the early 1940s reflected an interaction, present in other arenas at the time, between defense, technological development, and education. The evolution of aviation education involved pressure from the bottom up, with public interest in the subject contributing to the ultimate development of federal programming.\footnote{Bulletin of the National Association of Secondary School Principals 28, no. 126 (December, 1944): 7-224.} Air travel, which had rapidly expanded since the First World War, was at the heart of much of this public interest in the aviation sciences. On the Congressional level, proposals for the teaching of aviation in the nation’s public schools had appeared sporadically since the 1930s. It was World War II, and the events immediately preceding America’s entry into that conflict, “that focused attention on aviation education’s role in national security.”\footnote{Ibid., 131.} As with so many other developments in this period, 1939 was a critical year for the institutionalization of aviation education on the federal level. Federal involvement in civilian aviation education largely took place through the Civil Pilot Training Program, which began its activities in 1939. A division of the Civil Aeronautics Administration—which had become independent of the Department of Commerce in 1938—the Civil Pilot Training Program worked with colleges and universities to train civilian pilots as a reserve supply in case of war. After Pearl Harbor, the program became the War Training Service, still under the Civil Aeronautics Administration; it remained in place until July, 1944.

Aviation education was a federal priority at the primary and secondary, as well as postsecondary levels. George Zook, as an Office of Education official and head of the ACE, had been an early proponent of civilian aviation education.\footnote{John W. Rieken, “George Frederick Zook: Educational Leader in a Crucial Decade” (Unpublished dissertation, Georgia State University, 2005).} In 1941, the US Commissioner of
Education, John Studebaker, had reported to Congress that “public education had not kept pace with the rapid development and progress of aviation.” Studebaker repeated this call in 1942, more explicitly tying aviation education to America’s wartime fortunes and postwar reality:

In building up and maintaining our air power, the schools are called upon for service of prime importance by adding immediately to school-curriculum courses and activities in the field of aeronautics. The need for so doing is based upon two premises: first, the immediate relationship of aviation education in the schools to wartime needs; second, the relationship of aviation education to the postwar world.

State departments of education and local school districts responded with plans for implementing aviation education programs, or augmenting the courses already in existence. These state plans were recognized at the time as an example of “local, state, and Federal co-operation in education”—an important precedent for later interactions across these layers of government.

Aviation education was established in each of the United States by 1942, with varying degrees of representation among the states. Some states, like Pennsylvania, had aviation programs in place prior to World War II. In a number of Pennsylvania public school districts, aviation had been taught sporadically since 1924. Special courses for the training of public school teachers in aviation did not appear until 1942. In Washington state, home of the Boeing Company, over half of all public high schools offered aviation education courses in the 1942-1943 school year. In California in the period, 194 high schools had enrolled 4,661 students in aeronautics, and 32 had 2,288 students in aircraft maintenance courses. Between 1942 and 1944, the New

172 Ibid., “The Educational Road is Open”, 190.
York state legislature appropriated $240,000 for aviation education in its public schools. Curricula outlined in state aviation plans varied broadly, but generally included courses in airplane mechanics, the physics of flights, meteorology, navigation, and geography. Several state plans included a commitment to provide four hours of flight experience in a dual control airplane for each high school student enrolled in an aviation course. The California plan asked the central question of the ‘air age,’ one that tied foreign language and area studies to the sciences of aviation. “What adaptations,” the authors of the plan wondered, “will be necessary because of increased contact with people from other localities, with their varying interests, languages, occupations, nationalities, and governments?” While students across the United States were studying the science of flight, the education community was promoting a response to these questions in the expansion of foreign language instruction for national defense.

At a December, 1941 meeting of the Modern Language Association, representatives from the Department of State and the American Council of Learned Societies (ACLS) articulated the increasing importance of foreign language instruction as a “vital phase of national defense.” Foreign languages had been explicitly tied to national defense on the federal level as early as the autumn of 1941, when Congressman Louis Rabaut (D-MI) toured Latin America as head of a House Appropriations subcommittee. In reference to the New Mexico public school system, where Spanish-language instruction was a curricular requirement, Rabaut expressed that all

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“state educational authorities should be apprised of the real need for this type of language education as an aid to our national defense.”

Seen at the time to straddle vocational and cultural usages, foreign language instruction was perhaps a natural arena into which federally-funded defense education could expand. Like aviation education, the growth of foreign language education was influenced by pressure both from above and from below. Public interest in foreign languages, which had been slow to recover from a steep drop after World War I, began to increase as World War II brought Americans into greater contact with peoples across the globe. “Everyone is talking in ‘global’ terms these days,” wrote J.L. Brown in a 1943 survey—“global airways, global politics, global war.”

The synergy between aviation education and foreign languages outlined in the state aviation plans cited previously was not lost on the foreign language community. Educators seized on the opportunity presented by a new wave of public enthusiasm and federal interest to advocate for greater resources for foreign language instruction in the nation’s public schools. Emphasis was placed on the need to begin language instruction at the earliest age possible, to expand course offerings, to provide for more intensive language study, and to present opportunities for students to continue their language learning abroad. These points of emphasis were mirrored in higher education, which also saw the proliferation of new language studies programs on college and university campuses during the 2-3 years of the war’s greatest intensity. Foreign language instruction, at all levels, benefited from the experience of the


179 Ibid., 561.
intensive language programs provided to servicemen by higher education institutions across the country as part of the federally-funded Army & Navy Specialized Training Programs.

Although the education community was not successful in promoting its own plan for the defense training programs that would take place on college and university campuses, the military’s programs were not as dogmatic in their orientation as many educators had feared. Winston Thorson, who taught history in the ASTP at what was at that time Washington State College, recounted his surprise that he was not subjected as an instructor to the level of curricular control that he had initially expected from the military, and was not relegated, as he had feared, to a propaganda role.

I commend the reasonableness and good sense of the directors of the program—military and civilian alike—in leaving so much to the decision of the various schools, the separate departments, and the individual instructors.¹⁸⁰

This degree of relative independence would be echoed in future partnerships between higher education and the military in the years immediately following World War II. During the war the military and intelligence services acquired a preference for the type of analysis provided by the newly ascendant social sciences that formed the vanguard of what would become the modern Central Intelligence Agency.¹⁸¹ This was especially true of the Air Force, characterized by historian David Engerman as “the most consistent military customer for civilian expertise.”¹⁸²

The youngest of the service branches, the Air Force was particularly enthusiastic about applied

¹⁸² Engerman, 53, 64.
interdisciplinary and area studies in the early Cold War period, and matched this enthusiasm with a large amount of indirect federal support.

Demobilization and an Expanded National Role: 1943-1950

The spirit that prevails in the *Phi Delta Kappan* and the *Bulletin of the AAUP* during the period that I have characterized as education’s first wartime mobilization is one of a fervent, yet pragmatic desire to play a practical role in the nation’s defense. Educators, Freeland has written, emerged from the war with a zeal for social problem solving and a newly expanded national focus. As early as 1943, the conversation within the education profession had turned toward a deliberation on education’s role in the coming peace. There were some who were uncomfortable, however, with the readiness with which higher education had offered itself for service in the war—and what the implications of a defense role for education might be. One such view came from R.A. Kent, who worried, in April of 1941 (before Pearl Harbor), about a militarization of America’s campuses.

> I ask you to think what this country will be like and what higher education will be like if all the high school pupils in it devote the next four years to drilling, exercising, apple picking, bandage rolling, looking after working mothers’ children, doing janitor work, and learning how to fly. According to the plans of the Army and Navy, some ten per cent of the male population…are to be sent to college to learn enough mathematics and physics to study technology and enough reading and writing to understand commands. With deference to the educational wisdom of the Army and Navy, I do not believe that technically trained robots will be effective fighting men in time of war. I am certain that they will be a menace to their fellow-citizens in time of peace.

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183 Freeland, 70.

Others came away from the experience of Nazi Germany, Fascist Italy, and Soviet Russia with the realization that although it may be possible to educate for democracy, it is equally possible to educate for a decidedly less democratic set of world views. The tropes of education for democracy, and education for citizenship—present in each journal since its creation—were renewed in the midst of the war, and acquired a new urgency as education contemplated its place in a nation that had now emerged as a global power. “Nations have fallen into a vicious cycle,” wrote University of Pennsylvania professor Thomas Woody—

Nationalistic education facilitates war, and war destroys nations. Education, which has served narrow, nationalistic ends…should be renovated to serve man—to teach him to master a method of international adjustment more serviceable to the 20th-century world.  

Perhaps now more than ever, educators were acutely aware of their responsibility to train the nation’s youth for global stewardship. This awareness was heightened, after 1945, by the reality of the atomic bomb.

*Atomic Energy and the Case for Federal Support*

The broader, national focus that Freeland ascribes education in the post-war period is evidenced in the increasing presence in the journals of voices from outside the education profession—often soldiers, policymakers, and federal bureaucrats. David Lillienthal, chairman of the Atomic Energy Commission from…, charged education in its role as both a “technique”? and “foundation stone” of democracy with the task of educating citizens in the facts and implications of atomic energy. All disciplines should be involved, for the “consequences of

atomic energy is a spectrum as broad as the spectrum of human activities itself, and therefore as 
broad as teaching itself.”¹⁸⁶ Concern for America’s peacekeeping role and the exigencies of the 
atomic age were parlayed by the education community into increasingly vocal demands for 
sustained federal support for education. Douglas Scates represented this argument in his 1947 
testimony before Congress on the necessity of funding education research¹⁸⁷—

Education is basic to the American way of life and to its preservation. If it is defense that 
we are thinking of primarily, should we not ask, “What is more important in war than the 
human element?” … [E]ach person in our land is entitled to ask, “Don’t I count? Are 
physical resources everything and human resources nothing? Bombs to annihilate life 
may be developed by publicly supported research. Won’t my government support a 
science which helps prepare me for a better life?”

Others argued for a shift in terminology from “aid” to education, which conjured an image of 
education as a Depression-era pauper rattling an empty soup bowl, to the concept of “support”— 
and with it, the recognition that education served a national need worthy of endorsement. Such 
language increasingly arose in the months preceding and following the passage of the NDEA in 
1958; this was a new policy, for a new time.¹⁸⁸

Defence Education: Emergency Measure to Long-Term Policy

Although Scates continued to use the language of defense before Congress, the term itself 
diminished from federal usage—and, to a lesser extent, from the education journals—with


Scates was at this time a professor of education at Duke University, president of the American Educational Research 
Association, and chairman of Phi Delta Kappa’s Committee on Research.

remarkable alacrity at war’s end. It is apparent that there were multiple definitions of defense at work in these years, which might be differentiated according to their nuances and time-horizons. In his 1941 *Phi Delta Kappan* essay cited earlier, E.S. Evenden noted that, during World War I, schools had been called upon for what he characterized as “temporary defense services”—such as conservation drives, campaigns for the purchase of Liberty Bonds, and the training of the Junior Red Cross. These emergency defense activities on the part of the schools, Evenden writes, “made citizens school-conscious but too largely in terms of temporary services for immediate results.”

By World War II, the education community seemed determined to elevate and extend this role of education in the public consciousness to a long-range definition of education for defense. Importantly, the concept of education for national security enters the discourse at this time, with its inherent image of long-term maintenance as opposed to short-term, emergency response. At times, the concepts of defense and security were used concurrently. “The maintenance of national security is one of the major issues facing American education and the nation as a whole,” wrote Zook in 1948. Within the domain of education rested “the only kind of national defense which can really prevent war, namely, mutual international understanding.” In the post-war period, the role of education would now be to develop a constant supply of expertly trained manpower to meet the demands of war and of peace. Secretary of the Army Frank Pace outlined this vision in a 1952 address to the NEA—

> Only through education can we improve our ways of working with allies, and only through the development of the individual can we secure the qualitative capabilities

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189 Evenden, 36.

To do so is by no means an emergency measure, but rather a diligent, coordinated process encompassing all levels of human development, from cradle to college. It is this long-term view of defense that supplied the logic behind the NDEA, and resonated for the lawmakers who passed it.

Education’s Second Federal Mobilization (1950-1951): The Korean Conflict

On the federal side, the Office of Education began dismantling its defense structures in 1944, with the discontinuation of most Army Specialized Training Programs, and the dismantling of its National Defense Education division. Its 1944 annual report lists no defense personnel in the Office’s organizational chart—gone were the scholars who had flooded into these positions in 1941, many of them back to their pre-war teaching posts. The language of defense does not reenter Office of Education usage until 1950, when it is called forth by another imminent conflict—the Korean conflict. This second federal mobilization of education was brief; a flash in the pan compared with its predecessor a decade earlier. But it serves to confirm that, within the federal policy sphere, a short-term, emergency concept of defense education still prevailed. The Korean conflict, which began in June of 1950, thrust the Office of Education back

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into a defense footing. In 1951, the National Security Resources Board designated the Office of Education as,

[T]he focal point within the Federal Government where information regarding the educational and training needs will be gathered and distributed to the schools and institutions of higher education so that they may make their maximum contribution to the defense effort.\(^{193}\)

Although the Office of Education was prepared to re-engage the defense apparatus that it had developed in World War II, in particular its vocational and technical training programs and the designation of specialized training centers within higher education institutions, it appears that this mobilization remained one in name only. By 1952, all defense education language had disappeared from the reports, only to reappear in 1959 with the implementation of the NDEA.

National Defense Education Enshrined in Federal Policy (1958): The NDEA

In April of 1958, as the various bills that would become the NDEA were being formulated and debated, the president of the University of Toledo, Asa Knowles, wrote confidently that at no time “has there been a greater appreciation of the role of education in our society”—

Education has now become an instrument of national policy, and the teacher is part and parcel of it. Congress has been asked to spend upward of a billion dollars to strengthen our elementary schools, secondary schools, and colleges... We have not reached the age of federal 'control' of education, but we certainly have reached a stage of federal ‘influence’ in our nation’s education.\(^{194}\)

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President Eisenhower initially intended this legislation to be temporary—a holdover, perhaps, of the short-term view of defense education discussed previously. However, it was clear to Knowles and others that this legislation was likely to be permanent, and would open the floodgates of demand for expanded federal support of education. Knowles correctly predicted a sustained presence of “federal support at all levels—still in the interest of security and national welfare.” Far from a crash program, the ten titles of the NDEA were designed for sustainability. The bill itself was the product of a prolonged evolution of previous legislative attempts to secure federal support for public education, and was tempered by months of negotiation between Eisenhower, both houses of Congress, the education associations, and a public interest lobby.

The original provisions of the NDEA included Title II (loans to students in higher education); Title III (financial assistance to public and private schools for the strengthening of instruction in science, mathematics, and modern foreign languages); Title IV (fellowships to doctoral students with the goals of expanding the geographical distribution of PhD programs and the number and quality of college teachers); and Title VI, which provided support to area studies centers throughout the nation. An additional NDEA provision initially required that all fellowship recipients take a loyalty oath, renouncing any allegiance to organizations advocating the overthrow of the United States government. This was not an uncommon phenomenon in higher education—and indeed, in society at large—in this period, although it was nonetheless

195 Ibid., 306.

196 The other provisions of the original NDEA were: Title I (General Provisions); Title VII (Research and Experimentation in More Effective Utilization of Television, Radio, Motion Pictures, and Related Media for Educational Purposes); Title VIII (Area Vocational Programs); Title IX (Science Information Service); Title X (Miscellaneous Provisions). International Education Programs Service. “A History of Title VI and Fulbright-Hays.” http://www2.ed.gov/about/offices/list/ope/iegps/history.html; Wayne Urban, More Than Science and Sputnik; Barbara Clowse, Brainpower for the Cold War.
controversial. The loyalty oath provision was successfully repealed under the Kennedy administration in 1962.\textsuperscript{197} Title IV ended in 1973, after significantly increasing degree completion in the modern foreign languages and, in even greater numbers, in the sciences.\textsuperscript{198} Although never formally repealed, Title III ceased to be funded in 1978. In 1972, the National Defense Student Loan Program was rechristened the National Direct Student Loan Program, which in 1986 became the present day Federal Perkins Loan program. Along with Title VI, Title II has been one of longest running programs of the NDEA, persisting as a feature of higher education to the present day.

Historian Barbara Barksdale Clowse, who has written most extensively on the bill’s formulation and passage, has characterized the months of the bill’s “acute phase” and the preceding three years leading to its conceptualization as a mirror on the variety of ways that Americans strove for a sense of ‘national security’ in the 1950s.\textsuperscript{199} Clowse has argued persuasively that, in the policymaking process that led to the passage of the NDEA, Sputnik acted less as a catalyst of new interest in such legislation than as a neutralizing force that dismantled opposition to large-scale federal aid to education, and to similar bills being proposed in Congress at the time.\textsuperscript{200} The bill was authored by two Alabama Democrats, Lister Hill in the Senate and Carl Elliott in the House. Hill and Elliott were explicit in tying their bill to legislative precedents, with Elliott drawing upon the resources of the Library of Congress to investigate the “intent of Congress” in enacting the Morrill Act of 1862, the Smith-Hughes Act of 1917, and the

\begin{itemize}
\item \textsuperscript{198} Ibid.
\item \textsuperscript{199} Clowse, \textit{Brainpower for the Cold War}.
\item \textsuperscript{200} Ibid., 49.
\end{itemize}
George Barden Act of 1946.\textsuperscript{201} It is not insignificant that each of these conceptual precedents for the NDEA corresponds to a period of conflict. Since the 19th century, defense considerations seem to have been the most compelling stimulus for education funding at the federal level. The authors of the bill, and Eisenhower himself, were aware of the force that any defense language attached to the legislation would evoke. Public opinion surveys in the summer of 1958 had indicated broad public support for federal aid aimed at improving the ‘national security’ areas of the public school curriculum.\textsuperscript{202} Eisenhower and others in Washington sensed that any legislation that could be tied to the broad concept of national defense, so prevalent in the postwar period, stood a better chance of surviving Congress and reaching the president’s desk.

This connection was not lost on Stuart McClure, a Congressional staffer to Lister Hill, who is credited with giving the NDEA its title. When news of Sputnik’s launch went public in the United States, McClure immediately advised Hill that the time had come to move forward with the education bills that, for years, had languished in the House. McClure remembered,

\begin{quote}
I think if there was one thing I ever did in my work on the Hill, my work for my whole career, it was to focus Lister Hill’s attention on the opportunity which Sputnik, this Russian satellite, gave all of us who were struggling, and had been for decades, to establish a federal program of monetary aid to public education, and private, too, in some instances. And I’m really very proud of that.\textsuperscript{203}
\end{quote}

In later years, McClure characterized the National Defense Education Act as a “God-awful title,” rife with intellectual contradiction surrounding the spirit and purpose of public education. “It was a horrible title,” McClure recounted, “but it worked.”\textsuperscript{204} Although McClure may not have been entirely comfortable with the force that he was drawing upon, he seems to have sensed that the

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\textsuperscript{201} Cited in Clowse, 103.
\textsuperscript{202} Ibid.
\textsuperscript{204} Ibid. Also cited in Urban, 95.
\end{flushright}
term “defense education” had clout. Operative in his statement is the fact that the title of the legislation was ultimately successful. The bill had to be pitched in a way that seemed relevant to Congress and to the public—and in 1958, the decades across which the term had evolved culminated with the remarkable opportunity presented by Sputnik. Titling the legislation as McClure did was helpful in sending it through Congress; the education and policy communities had, for the past two decades, done the necessary legwork to make the term familiar and effective.

In its final formulation, the NDEA addressed a range of issues of concern to the education community, state and federal government, the military, and the public at large. These included changes to the curriculum, spurs to innovation, expansion of educational access, the assurance of trained manpower reserves, and the preservation of states’ rights. Echoing the language of the First and Second World Wars, the preamble to the Act referred repeatedly to the “present emergency”—this time in reference to the launch of Sputnik and the growing crisis of the Cold War. Its language deftly countered the “three R’s” of its opposition, for whom reading, writing, and arithmetic had been replaced by “Reds, race, and religion.” And it successfully marshaled the force of what Clowse has characterized as the “politically magical concept” of national defense before this was replaced in the 1960s by the potent rallying points of poverty and equity that underlay Johnson’s Great Society platform. In many ways, the NDEA may be viewed as having laid the groundwork for the other federal legislation that was

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206 McClure interview.

207 Clowse, 158.
soon to follow, most notably the Higher Education Act, and Elementary and Secondary

In Conclusion
The decades of discourse that undergirded the NDEA, presented in this study, offer a key
example of the ways in which public opinion, professional lobbies, and state and local actors in
the field of education have interacted with federal power to effect lasting policy change. This
study’s examination of federal higher education policy, and the discourse within and between the
higher education and policymaking communities that surrounded this legislation, presents a new
lens through which the evolution of federal higher education policy in the 20th century can be
viewed and traced. Although scholars of education and policy history (Clowse, Urban) have
explored this discourse, this study traces the discourse to 1940 and follows distinct threads in the
progression of the concept of national defense education up to the passage of the NDEA in 1958.

A specific contribution of this study to the field of higher education history in the central
argument that the federal government has, at various points in American history – and often
coinciding with wartime – ‘mobilized’ the nation’s higher education community and
infrastructure, with infusions of financial support and supporting legislation, for the purposes of
national defense. By following these mobilization periods from War World I, World War II, the
Korean conflict and the Cold War, and supporting them with primary source material from the
higher education and policymaking spheres, the study presents a process by which supporters of
federal aid to higher education moved the concept of national defense education from an
immediate, short-term utility within the context of a conflict to a long-range instrument of
federal higher education policy with the NDEA’s passage.
Whereas the primary scholars who have treated the NDEA (Clowse, Loss, Urban) have all recognized the phenomenon of national defense education, or education in the interests of national security, this study takes the new step of defining examples of a national defense education curriculum, prior to the NDEA, with its large-scale support for foreign languages and area studies, and what we now think of as the STEM fields. These earliest examples to receive federal funding under the label of national defense education were the vocational and civil aviation courses of the early 1940s, showing the critical tie of national defense education to vocational education, which I have illustrated in this study and which is a potential area of further research. However, I have also emphasized that – unlike the civil defense programs of the Cold War and earlier – national defense education was not a rubric for a defined instructional curriculum. Rather, it was a concept through which federal funding for higher education could be justified, and was articulated and promoted as such by supporters of these federal aid programs from both the education and the policymaking communities.

Finally, this study puts forward the central finding that whereas in the cases of World War I, World War II, and the Korean conflict, federal higher education funding had been limited to the moment of the conflict and a distinct ‘demobilization’ of the nation’s colleges and universities can be seen in the cessation of funding in the federal budget, the NDEA represented a long-term commitment by the federal government to the financial support of public education broadly, and higher education in particular, in the absence of an overt armed conflict. It was the triumph of the view held by supporters of federal higher education investment in both the higher education and policymaking communities that the nation’s defense is more nuanced than a wartime response; rather, it is a big tent that encompasses diverse efforts to produce an educated democratic citizenry. This expansive definition of the concept of national defense education –
broad, flexible, and responsive to the changing needs of the time – is a less visible but still vital component of the relationship between the federal government and higher education in the United States to the present day. Understanding the evolution and uses of this concept offers a new perspective not only on the development of federal higher education policy in the 20th century, but a context for interpreting the ways in which future conflicts will spur new iterations of national defense education.
Bibliography


The American Council on Education in the War Years: Defining a Persistent Vision of National Defense Education in Action

When the United States has faced periods of conflict, the relationship between higher education and the federal government has been thrown into stark relief – leaving neither side in doubt of its necessity to the other. The exigencies of war both solidify the utility of higher education in serving national purposes, and emphasize the necessity of federal support for public higher education’s survival. It is in these tumultuous times that supporters of public higher education have been able to make the case, most successfully, for the passage of legislation that channels federal dollars into public institutions. In these points of conflict in the American experience, war has opened a window for the education community. Through this new vantage, born of national emergency, education supporters have shifted the attention of the state and the public to the needs of the nation’s higher education system. The concept of national defense education evolved as the vehicle through which this support was promoted and justified, both by policymakers and by education leaders. A defense role for higher education was also, in wartime, the justification for the education community to have a seat at the decision-making table on major policies that would utilize the nation’s campuses in the war effort and shape a role for higher education in conflict and beyond.
The story of national defense education is, in many ways, a story of money. It was the rationale behind which direct federal funding for higher education could be justified – despite the language of the 10th amendment, which by default leaves education as the individual responsibility of the states. The development of a defense rationale for federal education funding during the 1940s led to the triumph of federal support for education, at all levels, that was to become the National Defense Education Act over a decade later. However, the relationship between education’s defense role, and the evolution of federal funding for education, took place within an environment of considerable circumspection by both the federal government and the education community. This is visible in the experience of the American Council on Education during the war, which is discussed here as a case of the national defense education concept applied in action. In this study, I use primary source material from the federal policymaking process and the ACE’s own wartime mouthpiece, the journal Higher Education and National Defense to show that through the ACE and its leadership – particularly under the wartime helm of George F. Zook as president and Francis J. Brown as the organization’s secretary and journal editor – a concept of education for national defense emerged that was more than a method, or a rubric, but the logical basis for the education community’s seat at the table on questions of national defense and the role the nation’s colleges and universities might play in America’s wartime experience. Given the position that the ACE, the largest and most visible higher education association, had held since the beginning of the war, it is not surprising that it seized upon the opportunity presented by the war to promote a system of reliable aid, democratically distributed for broad participation, and intended to support an expansive definition of education’s utility to defense. It was a position that the education community would take, again and again, leading to the passage of the NDEA in 1958 and – as I will argue in this study’s conclusion –
remaining a feature of the relationship between higher education and the federal government to
the present day.

Education and National Defense

On August 5, 1940 – with Battle of Britain underway and the Axis forces weeks away
from signing the Tripartite Pact – a group of educators met at the Mayflower Hotel in
Washington, DC, to begin to carve out a role for higher education in the coming conflict. This
was the Committee on Education and National Defense, a newly formed division of the
American Council on Education (ACE). At this early stage, the primary considerations of the
Committee centered on the selective service proposals then making their way through Congress.
The specter of World War I, one of campuses emptied of students in a crippling draft, haunted
higher education once again. George Zook, the omnipresent President of the ACE, had recently
joined his colleagues from the major education organizations\(^\text{208}\) to publicly testify in favor of the
Burke-Wadsworth Bill, later to become the Selective Service and Training Act of 1940. Zook
and his fellows endorsed the bill in principle, but asked that compulsory service be limited to
those students aged 21 and over. This testimony outlining a comprehensive statement of the
higher education organizations on the role of higher education in the nation’s defense was
entered into the record. The statement, “Education and National Defense,” contained the seeds of
the organizing principles that would define the ACE’s wartime role for the next five years.

\(^{208}\) Represented, in addition to Zook, were Dr. Guy E Snavely (Executive Director of the Association of American
Colleges); President Walter Hullihen (University of Delaware, and Chairman of the committee on military affairs of
the Association of Land-Grant Colleges and Universities); and Dr. A.C. Willard, president of the University of
Illinois and chairman of the committee of military affairs of the National Association of State Universities.
Significantly, Zook began the testimony with a rationale for his organization, the ACE, to act as the mouthpiece for education as a whole. Presenting the ACE as “an organization of organizations,” Zook noted that its membership included national and regional educational associations representing universities, colleges, state departments of education, and municipal school systems. “I mention this,” Zook added, “because it brings out the fact that the council itself is representative of the entire field of American education.” Whether the ACE was indeed able to speak for as broad a swath of the field of education as Zook maintained is certainly debatable. However, the presentation of the ACE as representative of higher education as a whole informs much of the Council’s public work in the subsequent war years – and, in the nearer term, provided the rationale behind Zook’s leadership role in this piece of Congressional testimony.

The statement read into the record that day, *Education and National Defense*, begins with the premise that a situation of “total defense” restricts itself not to the armed forces, but engages the whole of society. In an argument also drawn by Roosevelt, the statement references the experience of the Depression to suggest that the nation is already well acquainted with this type of deeply felt national crisis:

Because of the close integration of modern life, an emergency whether of peace or of war inevitably has its repercussions upon practically every aspect of American life. The depression was not restricted to Wall Street, but extended into each home, business enterprise, and classroom. Likewise, the concept of ‘total defense’ no longer is restricted to the military and naval forces, but involves agriculture, industry, education, government, and almost every other agency and institution of society.  

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210 Ibid., 122.
Education, then, would have a role to play both in peacetime and in wartime, in times of national need – a role that would validate, and necessitate, a system of ongoing communication and cooperation between education and the federal government. Zook introduced this logic with a bold statement: the interests of education and the established interests of the nation’s defense are one and the same.\textsuperscript{211} This idea would underlie the core platform put forward by the ACE

\textsuperscript{211} “In the interests, therefore, of education, which are identical with the long-time interests of the national defense…,” Ibid., 125.
repeatedly during the war years, in its attempts to articulate and forge a relationship between education and the federal government. Although the immediate goals and motivations for this cooperation changed over time, a clear impetus in the summer of 1940 was the memory of the experience of education in World War I, rising to the forefront of these educators’ concern as war once again seemed imminent.

The correlation between education and national defense was reinforced in the wartime publication of the ACE, *Higher Education and National Defense*, which was launched in 1940 and, in August 1941 reported that, following a second conference of education and government officials at the Mayflower Hotel in Washington, DC, “it was increasingly apparent that all governmental agencies recognized that education as such is national defense.” Education for national defense was not a method, or a rubric, like the civil defense programs that were underway throughout the country. It was instead the broader logical basis for education having a seat at the table on questions of national defense. At the Mayflower Hotel conference, July 30-31 1941, university presidents and administrators met with representatives from the War and Navy Departments, and the ‘non-military defense agencies’ (of which the US Office of Education was one). By the autumn of 1941, the ACE was able to elaborate its own defense program: one that was comprehensive, progressive in its goals, and socially inclusive.

The national defense planning put forward by the ACE differed significantly from that of the Army and the Navy in its inclusion of civilian concerns, and what might be characterized as a dogged insistence on inclusiveness for women, minority-serving institutions, and students of limited means. The ACE’s Baltimore conference, held July 15-16, 1942 – a “small working conference” of approximately 75 officers from higher education institutions and associations –

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produced a plan for greater coordination between education and government, which was forwarded to the Secretaries of War and the Navy, the Selective Service System, and the Chairman of the War Manpower Commission. Among other concerns, the plan drew attention to the failure of existing defense programs to include women, “who, as shown in other countries, have a vital part to play in the national effort.”

Earlier that July, the ACE had appointed a new Committee on Relationships of Higher Education and the Federal Government. In addition to the Ivy League and the large research institutions, the 12-person committee included voices from junior colleges, women’s colleges, teachers colleges, technological institutes, and historically black institutions. It was an opportunity – rarely missed by the ACE, it seems – to push the conversation on education and defense in a more inclusive direction.

It was the American Council on Education that took the lead in advocating a defense role for the nation’s colleges and universities as the conflict in Europe edged closer to American involvement. That the ACE stepped in to such a prominent role, at this time, was due largely to the efforts of its president, George F. Zook. Head of the ACE from 1934 until his retirement in 1950, Zook had served previously as president of the University of Akron, and as Commissioner of Education (for one year) under Franklin Roosevelt. Zook spearheaded a remarkable expansion of the ACE, and was seemingly inexhaustible in his efforts to carve out a role for the higher education community in Washington, DC. As Poland fell to the Wehrmacht in September of

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213 Higher Education and National Defense, no. 31 (July 24, 1942).

214 The full committee were: Edmund E. Day, President of Cornell University (Chair); O.C. Carmichael, Chancellor of Vanderbilt University; James Bryant Conant, President of Harvard University; W.H. Cowley, President of Hamilton College; Clarence A. Dykstra, President of the University of Wisconsin; Henry T. Heald, President of the Illinois Institute of Technology; Byron S. Hollinshead, President of the Scranton-Keystone Junior College; Katherine McBridge, President of Bryn Mawr College; F.D. Patterson, President of the Tuskegee Institute; Robert G. Sproul, President of the University of California; Edward V. Stanford, President of Villanova College; Roscoe L. West, President of the New Jersey State Teachers College. Higher Education and National Defense, no. 32 (August 28, 1942).
1939, and Roosevelt declared a limited state of national emergency, Zook began his campaign to thrust education into the national conversation. It was clear to Zook that “the national defense” in response to this conflict “must involve extensive preparations along both military and civilian lines.” Zook’s desire to include a civilian component in the nation’s defense programs was a continuation of a theme begun by scholars involved in the Student Army Training Corps in World War I – and it was one that the education community would repeat in subsequent conflicts. National defense education, in the eyes of educators, was to be a civilian effort. With the coordination of the ACE, the nation’s leading education organizations prepared an official statement on education and “the emergency” for the National Resources Planning Board, an executive office that reported directly to Roosevelt. Instructional materials, and a statement for teachers concerning international relations and the war, were also produced. Letters went out to one hundred prominent educators, soliciting their opinions on the implications for education of the growing international crisis. In August of 1940, Zook and his counterpart at the NEA, Executive Secretary Willard Givens, presided over a meeting of forty-nine major education associations at which the National Coordinating Committee on Education and Defense was formed.

The Army/Navy Specialized Training Programs: An Ambitious Role for Education

Perhaps the most remarkable product of the National Coordinating Committee on Education and Defense was its attempted participation in the formulation of the Army/Navy Specialized Training Programs, the World War II incarnation of the Students’ Army Training Corps of World War I. Although these attempts ultimately failed, they represent a significant

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effort on the part of the education organizations for a broader national role. Following a January 1942 meeting of the National Coordinating Committee on Education and Defense, held in Baltimore, the education community began work on a plan for a large-scale mobilization of college and university campuses in the war effort. According to Zook, the ACE and other leaders were inclined to follow a British model, in which higher education institutions were utilized both for direct military needs, and for the training of personnel in civilian services related to national defense. This plan was rejected by the various government agencies involved, presumably for its civilian focus and college and university control, prompting the ACE to organize a second Baltimore conference in July 1942, which adopted resolutions calling for the rapid establishment of a coordinated plan for the “utilization of higher education toward the winning of the war.”

In August, the War Manpower Commission put an end to any hope of a broad training program at the college level that incorporated both military and civilian components. All responsibility for determining the content and specifics of such training would rest with the Army and the Navy.

The Army and Navy plans for training programs on college and university campuses were developed independently of one another but were released on the same day: December 12, 1942. No provision was made in either plan for the training of men for civilian service—a point of contention for the ACE, which developed its own, unsolicited training plan, and submitted it to the Army and the Navy in December. Soon after the plans were announced, a collaborative committee of the Army, Navy and War Manpower Commission selected the campuses that would house these training programs, and concluded independent contracts with the institutions themselves. The ACE, and even the Office of Education, had been relegated to a minor role at

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216 Ibid., 4.
217 Ibid., 7.
best in this process. But individual institutions were empowered to participate directly in federal defense activities on an unprecedented scale; and individual scholars were given an unexpectedly broad role in the development of curriculum. The curriculum of the ASTP emphasized engineering, mathematics and the sciences, but also included a foreign area and language curriculum that had been developed with the cooperation of the American Council of Learned Societies. By the fall of 1942, the Army’s Intensive Language Program was offered on 18 campuses with instruction in 25 languages, many of which had never been taught in American colleges.

Through the Army Specialized Training Program, higher education was called into the service of national defense in a profound way. The programs that were to sweep through the nation’s campuses in 1942-1943 elevated higher education to a defense role that it had not

\[218\] At the University of Virginia, for example, 1,300 of the institution’s 1,700 students were involved in some type of military training program by the spring of 1943. For a case study of one ASTP, see: Jennings L. Wagoner, Jr., and Robert L. Baxter, Jr. “Higher Education Goes to War: The University of Virginia’s Response to World War II.” The Virginia Magazine of History and Biography 100:3 (1992), 399-428. The archive of the Western Signal Corps at the University of California provides a lively anecdote about what life was like on a campus that had been transformed by the ASTP – in this case the Army Signal Corps: “In January 1943 the University of California joined the Army, was given the serial number of WSCS, and promptly assigned to Signal Corps. The campus quadrangle saw the colors go up at the call for reveille. College hotels and fraternities became barracks for new students in khaki. Myer Hall was post headquarters and new signs were hung over old doors...Commandant, Executive Officer, Director of Training, Adjutant. Dit das of 300 code positions, together with simulated battle noises, invaded the studious quiet of the University library. Allen Hall, formerly the building of Animal Science, bristled with antennae, transmitters, receivers. In an area between there and Saltzman Hall, two tanks put in an appearance, as well as old plane fuselages. Hazen and Russell Halls were taken over by Wire Branch, Greely Hall by Radio Repair. Squier Hall became the home of Radar, strictly G-2. A formidable sash of barbed wire was stretched about its girth, then placed under twenty-four hour a day armed guard. By day the gymnasium was given over to Military Training, with firing on the dry range...pitching tents...exploring mine fields...learning techniques of gas mask drill. By night it often resounded to the shuffle of GI shoes beating it out to the jive of a GI band. In vacant fields tyro linemen ran reels of wire, climbed poles, mastered the intricacies of their branch of communications. The infirmary changed its title to dispensary and learned about sick-call. TMs and FMs became classroom books. Unregimented comings and goings of students from class were replaced by the hut-hut of disciplined platoons. Army vehicles rolled past sentries. Guards walked their posts. But that day has drawn to a successful close. WSCS has served its tour of duty with the Signal Corps. And as the flag comes down for its last retreat, we say to WCSC in deep sincerity...so long. It’s been swell being a part of the organization and sharing in its history.” University of California Special Collections, AR-185, Western Signal Corps, Album, August 1944.

previously occupied. Scholars tailored their curricula to meet the needs of soldiers preparing for the battlefront – foreshadowing a moment when these soldiers would once again fill the classroom, taking advantage of the GI Bill to ease their adjustment into civilian careers. University scientists and laboratories saw a level of federal patronage that was to carry them well beyond the war’s end. Certainly, the program did not conform to the vision outlined by the National Coordinating Committee on Education and Defense. The intricacies of the education community’s mobilization plan, and the administrative marginalization of the Office of Education in the ultimate implementation of the Army/Navy plan, are explored next. Despite its disappointments, that the education community attempted to contribute such a broad-reaching plan is, in itself, significant. The education lobby’s activities on the national stage in World War II, and its ability to maintain a vocal role in articulating a defense utility for education that transcended that conflict, were essential components of higher education’s Cold War role.

Higher Education and National Defense – the ACE’s Wartime Messenger

Part I: 1940-1941

The position of the ACE, throughout the war years, was articulated most consistently through its official journal, Higher Education and National Defense. From the first issue of the journal in 1940, to the final installment five years later, the publication was stewarded by Dr. Francis J. Brown (1894-1959), the longtime secretary of the ACE. From what little is known of Dr. Brown, it is clear that he moved nimbly among the settings and players with which the ACE was engaged during these eventful years. As the United States’ involvement in World War II progressed, Brown found himself plucked from his office in New York University’s School of
Education and located, instead, at a desk in the War Department, which he held for much of the war. It was a physical representation of Brown’s adept navigation between the halls of academia and government, a feat accomplished by several others in this narrative and perhaps catalyzed or facilitated by the exigencies of the conflict.

In November 1939, Brown was tapped by Zook as a consultant to the ACE on “matters related to education and national defense.”\textsuperscript{220} Although the content of \textit{Higher Education and National Defense} is largely uncredited to any author, it is reasonable to conclude that Brown was behind much, if not all, of the writing. His voice enters the narrative in periodic editorial comments, and it is possible to discern his personal stamp on the views that the publication expressed and shaped through its five-year run. Brown described higher education in 1939 as sitting between a “Scylla and Charybdis,” between a desire to render service to the nation in the time of emergency and the same fears of total cooptation by the military that haunted the colleges and universities in 1917-1918. Navigating between these responses, finding the “middle way through rendering every possible and needed service to the defense program, yet at the same time maintaining basic educational values and activities” was the platform of the ACE and Brown’s journal until the war’s end.\textsuperscript{221} At a speech at Vassar College in November 1941, Brown emphasized the differences between 1917 and 1941. It is imperative, he said, to


\textsuperscript{221} Ibid., “Organization and Activities of Defense Councils,” 33-34.
“realize that oceans are no longer friendly; that collective security can be enforced only with tanks, bombers and armed men; and that there may now be a price too dear even to pay for peace.”\textsuperscript{222} He spoke of the need to plan for a world “beyond the present emergency” – a world for which education alone could prepare the nation. This would be an ongoing theme of the ACE during the war years, expressed throughout \textit{Higher Education and National Defense}. 

Particularly in its early years, the journal elaborates a close relationship between higher education and the defense agencies, in which educators were serving as specialists and advisors.\textsuperscript{223} In August 1940, the dean of Purdue’s School of Engineering, A.A. Potter, was serving as a liaison between the nation’s engineering schools and the federal defense agencies. The War Department requested that the ACE’s Committee on Modern Languages, under chairman R.H. Fife, submit plans for the preparation of syllabi in advanced language study and for tests of language ability, which the journal reports were completed that summer. The ACE was asked to advise directly on defense policy, with the Joint Army-Navy Selective Service Committee requesting at set of recommendations regarding deferment of college students. These recommendations were prepared by Francis Brown, with the help of the ACE’s Committee on Higher Education and National Defense. The Joint Committee was at that time drawing up regulations for local draft boards to be submitted to the President. The ACE hewed to a position that advocated draft deferments for a broad swath of college students – a position that was, ultimately, not accepted by the defense agencies. The ACE’s rationale for this position expresses several ideas that would be critical to its wartime position more generally, including the broad

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\textsuperscript{222} \textit{Vassar Miscellany News} XXVI (November, 1941): 3-5.

\textsuperscript{223} \textit{Higher Education and National Defense}, no. 2 (August 21, 1940).
\end{footnotesize}
view of defense as encompassing many mechanisms, and the notion of education’s critical
defense-related role in preserving American institutions:

The first and foremost consideration must obviously be the best interests of the national defense. However, total national defense includes not only military preparedness but also the preservation and development of all social institutions basic to American life. Therefore, an effective program of national defense demands the maintenance of institutions which provide a continuous supply of men skilled in professions and vocations and qualified through education or practice for expert service to society.\textsuperscript{224}

Prior to the United States’ immediate involvement in the war, the education community enjoyed a remarkable degree of access to the decision making processes of the defense agencies, and was able to negotiate a broad definition of ‘defense roles’ for students and researchers. The November, 1940 issue of the journal captured the following exchange between Zook and Henry Stimson, the Secretary of War:

Zook: Many faculty members and the majority of the graduate students are conducting research activities, the continuity of which in many instances is important in the total defense program. It is essential that educational facilities be retained at the same high level of effectiveness in order to assure a continuous supply of men trained in occupations and professions as well as the continuance of significant research.

In light of these facts, the Subcommittee on Military Affairs of the National Committee on Education and Defense, representing fifty-five national educational associations, earnestly requests that in the calling out of reserve officers full consideration be given to the significance of their civilian occupations in the defense program. Short of actual war those individuals whose services cannot be replaced without serious loss to the educational institutions should not be called into active duty.

Stimson: Please be assured that the War Department is most anxious that the current expansion of the Army may be achieved with the minimum disruption to the educational facilities of the country, and further that I shall give the most serious consideration to any concrete proposal that you may care to submit toward that end.\textsuperscript{225}

The ACE accepted Stimson’s suggestion, with the caveat that its defense program was not yet fully articulated, and recommended that deferments be implemented for higher education faculty

\textsuperscript{224} \textit{Higher Education and National Defense}, No. 4 October 15, 1940. Emphasis mine.\textsuperscript{225} \textit{Higher Education and National Defense}, no. 5 (November 19, 1940).
in medicine, dentistry, pharmacology, biology, bacteriology (related to public health), physics, geology and engineering. At an ACE conference in February 1941, Brown suggested that only two criteria should factor into the decision on military deferment: “is the field of study essential to national health, safety, or interest, and is the individual potentially a necessary man.” At this early stage in America’s involvement in the war, the education community was able to promote a very wide definition indeed of who constituted a ‘necessary man’ in civilian rather than military occupations.

Students, on the other hand, were not always so sanguine about the utility of their studies with respect to the looming conflict. As early as August 1940, President Roosevelt sought to stem concerns over early enlistment:

Reports have reached me that some young people who have planned to enter college this fall, as well as a number of those who attended college last year, are intending to interrupt their education at this time because they feel that it is more patriotic to work in a shipyard, or to enlist in the Army or Navy, than it is to attend college. Such a decision would be unfortunate. We must have well-educated and intelligent citizens who have sound judgment in dealing with the difficult problems of today. We must also have scientists, engineers, economists and other people with specialized knowledge to plan and to build for national defense as well as for social and economic progress.

Visible in this statement is Roosevelt’s broad view of national defense, which had been evident in his public speeches since the mid 1930s. It was a device that the education community also employed, in order to advance a more ecumenical vision of education’s defense role during and beyond the war years.

In the spring of 1941, Higher Education and National Defense published an open letter from the Chancellor of New York University, H.W. Chase, to the student body, which encapsulates many of the tensions and fears that higher education leaders were experiencing around the issues of selective service and enrollment:

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226 Higher Education and National Defense, no. 8 (February 19, 1941).

227 Higher Education and National Defense, no. 2 (August 21, 1940).
I would urge all our students who had planned to continue their work in the University next year, or who had been in doubt as to their plans, not to interrupt their training unless it is imperatively necessary. *We shall need in this country, as never before, all the trained personnel that can be mustered to cope with problems that will inevitably follow in the train of current world-wide stress and disorder.* You young people now in college are the nation’s most valuable reserves. We must not unnecessarily deplete this reservoir. *Far better, for your own good and the country’s, that the training you are now receiving be carried forward as assiduously and without interruption, now, to logical objectives, than that it be thrust aside for some more immediately appealing pursuit.* The Selective Service authorities are encouraging college students to plan to coordinate their education and their military service… In general, it is not wise for young men below draft age but not subject to early call to abandon college prematurely. We must not permit tension of the times unnecessarily to disrupt normal procedures. *We are moulding [sic] the University program at every turn to national defense needs,* without abandoning, however, fundamental studies, and we ask the cooperation of our students and their parents in the pursuance of this policy.²²⁸

Chase’s statement toes the line of the ACE’s overall message at this time, which included a broad definition of each individual’s defense role, and the need to maintain what Brown called a “sane balance between immediate and long-range defense needs.”²²⁹

A July 1941 conference of college and university presidents and representatives of the government’s defense agencies, convened by the ACE, further articulated this message, and expanded it with a remarkably inclusive image of civilian defense. A statement of the conference attendees read:

> Colleges and universities earnestly and sincerely seek to serve the national defense. They desire only that their extensive physical plant and equipment and highly skilled personnel shall be utilized to the fullest possible extent in the national interest. The basis for determining such service is *a comprehensive understanding of defense needs, both military and non-military.*

An additional suggestion of the conference attendees urged government agencies to “utilize all available personnel for a defense role, without regard to race, color, nation of birth, creed or sex.”²³⁰ Although the ACE’s inclusive position on the question of education’s role in national

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²²⁹ *Higher Education and National Defense*, no. 8 (February 19, 1941).

defense did not change with the United States’ official entry into the war, the willingness of the defense agencies to entertain such suggestions did.

Part II: 1942 – 1945

Within days of Pearl Harbor, the ACE’s Subcommittee on Military Affairs was convened for a series of emergency sessions. Two additional committee members were brought on board to represent men’s colleges and junior colleges, in consideration of the effect of the war on these institutions – Francis P. Gaines, President of Washington and Lee University, and Walter C. Eells, Executive Secretary of the American Association of Junior Colleges. Then chairman of the subcommittee, A.C. Willard, President of the University of Illinois, resigned for unspecified reasons and was succeeded by the newly appointed Chairman of the Military Affairs Committee of the American Association of State Universities, President Fred Engelhardt of the University of New Hampshire. It is clear that at this time the ACE, through its subcommittees, was in frequent contact with General Lewis Blaine Hershey, director the Selective Service System. The council’s recommendations to General Hershey included the continued postponement of induction of students until the end of the first semester, placement in inactive reserve or IIA classification for students completing degree requirements before July 1 1942, and continued occupational deferment of graduates and undergraduates in “necessary fields.”

Although Hershey himself was supportive of selective deferment, at this time he responded testily that his office would be unable to meet all of the ACE’s recommendations, given that “we cannot very well modify our student policies so as to make them more lenient than the ones which existed prior to the

231 Higher Education and National Defense, no. 19 (December 20, 1941).
declaration of war.\textsuperscript{232} His patience, it seemed, was wearing thin. Nevertheless, Hershey articulated a concept of ‘total war’ that envisioned the many roles that Americans might play in the war, and counted education as key to preparing the nation to meet these needs.

In the early years of American engagement in the war, the ACE was called upon by both government agencies and private organizations to create ‘inventories’ – as it were – of the colleges’ and universities’ resources that could be directly tapped for defense requirements. In 1942-43, the ACE was tasked with two large-scale surveys of this type. The National Resources Planning Board had requested data for what ultimately became the National Roster of Scientific and Specialized Personnel, which the ACE delivered in April 1942. In January 1943, the ACE completed a comprehensive survey, requested and funded by the Carnegie Corporation of New York, of the supply of personnel that the nation’s colleges and universities could provide in a variety of fields. In this era of a non-professional military, and following after a period of isolationism, the United States was attempting to rapidly assess the precise resources that were available for national defense. The nation’s higher education institutions were a natural place to look for a host of resources – manpower, facilities, and specialized expertise chief among these.

Use of these resources, however, would not come without a cost – a point that did not escape the federal government or the higher education institutions themselves. On May 10, 1942, the ACE convened a conference of ten representatives of the National Resources Planning Board, the National Roster of Scientific and Specialized Personnel, the Navy and War Departments, the Selective Service System, the War Manpower Commission and the War Production Board. The result was the following recommendation:

Whereas the higher education institutions stand ready to use their resources in any way necessary for victory in the present war but cannot under existing conditions provide the Army and the Navy with the trained personnel necessary to meet the known present needs of those services;

\textsuperscript{232} Higher Education and National Defense, no. 21 (February 19, 1942).
Whereas the future need of the several branches of the army service for an increasing number of young men possessing the kind and quality of education and special training which can be secured only through our colleges, universities, and technical schools is now tragically evident, and;
Whereas the war time [sic] accelerated programs of study deprive many college students of their usual opportunities to earn money, therefore,
Be it resolved that we urge the Secretary of War and the Secretary of the Navy to bring before the War Manpower Commission not only the present critical situation, but further the fact that this situation can be met only by the prompt appropriation of funds for the assistance of college and university students.\textsuperscript{233}

The conversation about federal funding for higher education – a prospect that at times made both the government and the universities wary – had begun even prior to Pearl Harbor. However, the ACE was now poised to drive it in a new direction that would include direct student support.

**Funding National Defense Education**

Roosevelt’s January 1940 budget request to Congress included $1.8 billion in defense spending. On June 18, 1940, Congress adopted the National Defense Tax Bill designed to yield $994,300,000 to defray part of the cost of the accelerated defense program. The education component of this and subsequent funding in 1940-1941 supported vocational education and utilized, in part, the existing infrastructure of the Civilian Conservation Corps. The Office of Education collaborated with state departments of education to produce training courses and materials on topics that would “contribute materially to the interests of the national defense.”\textsuperscript{234}

These were technical manuals geared toward training individuals effectively, and quickly, in skills that would be needed in wartime. One example is the “Suggested Course for Training Marine Pipe Fitters,” a collaboration between the State Department of Education of Alabama, the

\textsuperscript{233} Higher Education and National Defense (June 2 1942). Emphasis mine.
\textsuperscript{234} 76th Congress, 3rd Session, Chapter 432, Section 38: June 26, 1940.
University of Alabama, the Mobile Public Schools, the Alabama Drydock and Shipbuilding Company, and the US Office of Education, published in August 1941. Other subjects for which course development was authorized by Congress in June, 1940 included – but were not restricted to – road and bridge construction, photography, signal communications, cooking, and first aid.

Direct federal spending on colleges and universities was tentatively introduced as part of the ‘acceleration’ of course work that would move young men through the higher education system more quickly, ensuring a steady stream of manpower to the Army and Navy. In January, 1942 – weeks after Pearl Harbor – the “largest gathering of leaders in higher education ever assembled”\textsuperscript{235} met for a two-day conference held jointly by the Military Affairs Committee of the ACE’s National Committee on Education and Defense, and the US Office of Education. The conference resulted in the adoption of fifteen resolutions that elaborated a “program of cooperative action between the colleges and the agencies of government.” Among the resolutions was a plan for the acceleration of college programs, and a study of the “extent and bases of federal aid desirable to make acceleration possible.”\textsuperscript{236}

\textit{The Emergence of Federal Student Loans}

In its May 10, 1942 conference resolution, the ACE had expressed concern over the higher education institutions’ readiness to appropriately respond to the range of defense needs required at that time, and had also recommended direct financial support to students. In response, the War Manpower Commission pressed upon the Federal Security Agency and the Bureau of the Budget

\textsuperscript{235} According to the ACE, this conference included an estimated 1,000 college and university presidents from 46 states, as well as Canada and Puerto Rico.

\textsuperscript{236} \textit{Higher Education and National Defense}, no. 20 (January 19, 1942).
the “urgent need for Federal financial aid to accelerate the training of scientific, professional and management personnel to the end that the war production program may not be impeded.” In a further step, the Commission issued a recommendation for “such aid to be extended to selected students pledged to engage in specified war duties and to educational institutions equipped to provide such training.” Significant, federal aid was to flow both to students and to the colleges and universities that supported their training.

The government wasted little time in moving this aid forward. By May 28, a Congressional appropriation to provide federal aid to students participating in accelerated education programs had been approved by the Bureau of Budget. President Roosevelt then submitted a statement to Congress that included

[L]oans to students in technical and professional fields (national defense), enabling students to pursue courses beyond the second collegiate year who have maintained acceptable levels of scholarship, are in need of assistance, and agree in writing to engage, for the duration of the wars [sic], in such employment or service as may be defined by the War Manpower Commission. Such loans to be paid to them by colleges and universities upon estimates submitted by them.

An appropriation of $10,000,000 was to be made immediately for loans that could not exceed the cost of tuition and fees, plus a stipend of $25 a month, or $500 per year in total. For comparison, this stipend would equate today to a buying power of just over $400 per month, or slightly over $8,000 for the yearly maximum (tuition and stipend). These loans were issued by the United States Treasury at an annual interest rate of 2.5% with repayment made through the colleges and universities, or agencies associated with them. For many recipients, these loans would effectively become grants. Debts would be canceled if the student served as designated by the War Manpower Commission, entered into military service, or suffered total disability or death. The

loans were administered by the Commissioner of Education, in consultation with the Chairman of the War Manpower Commission. An additional appropriation of $100,000 was made available to the Office of Education for their salaries and expenses required to administer the program. The loan program became part of the United States Office of Education appropriation for 1943, after having been reduced to $5 million but was bolstered by $5 million to the National Youth Administration for the continuation of its college work program, and an additional $3 million for its secondary school programs. Loans were to be made available beginning in July 1942.\footnote{Higher Education and National Defense, no. 30 (July 10, 1942).} This would appear to be the first documented instance of federal education loans made directly to students, and it was a remarkable step in the evolution of federal funding for higher education.\footnote{I make this claim cautiously. However, my work with federal and Congressional documents for the interwar period, and with secondary source literature, has not yielded an earlier instance of federal student loans. I note this with the important caveat, quoting a June 2014 conversation with John Thelin, that “the limit is that the federal record is silent about the possibility of earlier kinds of pioneering efforts.”}

The ACE had brought the needs of the higher education community before the federal government, and had won a major resolution. It hoped for even more: on June 25 1942, the ACE’s Committee on Military Affairs met with representatives from the Selective Service System and the National Roster of Scientific and Specialized Personnel and issued a series of resolutions, of which #4 is the most pertinent to this story,

> Provision for out right [sic] grants to students on the basis of these individuals’ need for such said and sufficient in total amount to provide opportunities for training of all men and women whose effectiveness of service to total war will thereby be substantially increased.\footnote{Higher Education and National Defense, no. 30 (July 10, 1942).}

Given the position that the ACE had held since the beginning of the war, it is not surprising to see in this resolution its continued promotion of a system of reliable aid, broadly distributed, and intended to support an expansive definition of defense utility. It was a position that the education
community would take, again and again – leading straight to the passage of the National Defense Education Act and beyond.

Push, Pull, and the ACE’s Influence on the Wane

In the summer of 1942, the ACE convened its second Baltimore conference, held July 15-16. This “small working conference” of approximately 75 officers from higher education institutions and organizations produced what was the education community’s most forceful statement to date on the lack of a “coordinated plan” for the “utilization of higher education in the war effort” – an issue that had concerned the ACE for some time. Although the ACE hewed to the language of a ‘coordinated plan’, it is clear that what was at stake was the ACE’s, and the education community’s, frustration at not being given a greater role in decision making or a more prominent seat at the table when it came to the government’s wartime planning. On July 20, the following resolutions of the conference were transmitted to the Secretaries of War and Navy, the Director of the Selective Service System, and the Chairman of the War Manpower Commission:

1. We deplore the continuing lack of any adequate, coordinated plan for the most effective utilization of higher education toward the winning of the war, and we urge the establishment of such a coordinated plan at the earliest possible moment.
2. The government is not utilizing the institutions of higher education to capacity and is, therefore, impeding the flow of highly trained manpower essential to victory in a long war.
3. Through the provision of year-round instruction and many of the recently adopted changes, higher education has demonstrated its readiness to devote all its facilities and energies to the war effort. However, the lack of any adequate, coordinated plan has given rise to widespread confusion among government agencies, educators, students, and the general public. This confusion constitutes a serious barrier to the full wartime utilization of higher education and hence to the successful prosecution of the war.  

\[242\text{ Higher Education and National Defense, no. 31 (July 24, 1942).} \]

\[243\text{ Ibid., emphasis mine.} \]
Additional resolutions of the conference expressed concern that, due to financial constraints, large numbers of men were barred from the type of advanced training that would qualify them as officers or skilled defense specialists. “Economic status, race or creed should not be allowed to restrict the training of adequate, skilled manpower at the college level for the war program,” the committee resolved. Finally – as the ACE had lamented early and often – the current defense policies, as they pertained to higher education, were too narrow. They failed to provide “clearly defined avenues of training and service for those male students who are physically unqualified for military service” but could serve in industrial or civilian capacities, and they entirely fail to “include women, who, as shown in other countries, have a vital part to play in the national effort.”\(^{244}\) The resolutions display a concern that the nation’s colleges and universities be the only higher education training facility for the military’s needs, a concern that was likely spurred by the creation in April 1942 of the Army Institute in Madison, WI – funded and administered by the Army.\(^{245}\) Finally, those gathered at the second Baltimore conference recommended that the ACE continue to play the role for which it was established during the First World War – as the representative of all the organizations of higher education, and the appropriate nongovernmental body to “implement the proposals herein stated and to serve in a continuous capacity for

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\(^{244}\) *Higher Education and National Defense*, no. 31 (July 24, 1942).

\(^{245}\) The Army Institute offered correspondence instruction in English, composition, American literature, modern foreign languages and a basic social science curriculum, along with vocational, technological, and professional courses. While I do not suggest that the Army Institute was the reason for the ACE’s marginalization in the ASTP/NSTP formulation process, I do suggest that it represented the possibility that the military could produce its own higher education training programs independently of the civilian universities, although I do not suggest that it was intended to replace that work that was being done on the ASTP/NSTP campuses. The Army and Navy had a level of control over those programs that would, I suspect, make dissatisfaction unlikely. What is evident, however, is that the Army Institute was perceived by some within the ACE’s membership as a potential threat to the civilian universities’ role in the wartime training programs, resulting in the reference that I have highlighted in the July 20 conference resolutions.
facilitating cooperation between higher education and government.” The ACE wanted a greater role not only in the creation of defense policy, but in its implementation at the college and university level. This was not a concession that the defense agencies were willing to make.

The War Manpower Commission responded to these resolutions at the end of July, appointing a special committee that met several times that August to consider the issues raised by the second Baltimore conference. Committee members were “mindful of the patriotic anxiety of the leadership of our higher education institutions that these institutions will have the opportunity to perform their duties at this critical time.” The committee noted that, at that time, all branches of the armed services were in fact utilizing “certain of the resources” of the nation’s colleges and universities, however, “the nature and extent of this use must necessarily depend upon the need therefor in the conduct of the war.” In a significant blow to the ACE’s ecumenical vision of national defense, the committee stated in no uncertain terms that “all able-bodied men are destined for the armed forces” and that the “responsibility for determining the specific training for such students is a function of the Army and Navy” – not, one can infer, the responsibility of the ACE and its members.

It was apparent that there would be no new plan for a coordinated utilization of higher education prior to the beginning of the 1942-1943 academic year, which was a goal of the second Baltimore conference. It is important to note that the defense agencies did not adopt the language of a ‘coordinated plan’, recognizing – one might guess – that there was indeed already a plan in place, albeit a plan that was coordinated by the defense agencies themselves. Rather than the ACE taking the central role of liaison between higher education and the defense agencies, the Division of Professional and Technical Personnel of the War Manpower Commission (headed by

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the president of Purdue University) was tapped to coordinate with higher education institutions and government agencies on any adjustments to higher education defense programs, or plans and procedures for their greater utilization. The Chairman of the War Manpower Commission asked the Office of Education to prepare a plan for utilization of the higher education institutions – a four-man commission that did not include Zook or Brown. Instead, it included the presidents of Hamilton College and the University of Wyoming, a dean of the University of North Carolina, and the comptroller of the University of Minnesota. With the exception of the president of Hamilton College, all were largely outsiders to the prior activities of the ACE. The absence of ACE representation on the commission may point to an effort to remove or reject the sway of its leadership, or may illustrate the relative influence of the ACE within the higher education landscape at this time. In response to the commission appointments, the ACE appointed a new committee on Relationships of Higher Education and the Federal Government, a 12-person group that included James Bryant Conant of Harvard and a set of diverse constituencies that included leaders of women’s colleges, teachers colleges, and the Tuskegee Institute. In September 1942, the new committee expressed its dissatisfaction with the positions of the Secretary of War regarding the utilization of the ACE, and stated its conviction that “higher education should be asked to assist in the formulation of policies not merely to assist in the details of their application.”247 Contained in this statement is the essence of the aspirations and frustrations that the ACE experienced, in its interactions with the federal government, throughout the later events of the war.

247 Higher Education and National Defense, no. 34 (October 5, 1942).
Seeds of the GI Bill

Perhaps admitting that its wartime role would not be what it wanted, by the summer of 1943 the ACE was beginning to plan for higher education’s role in the postwar period. That June, the ACE sent a survey to all Council members concerning their views on postwar educational programs for service personnel. With just two exceptions, all 233 respondents expressed a belief that the “federal government has definite responsibility to provide educational opportunities for military personnel after demobilization.” Respondents believed it to be a minimum obligation of the government to prepare veterans for useful and satisfying careers that would transition them to peacetime life. Responses fell within a continuum of feeling as to the body that should be responsible for planning and coordinating this opportunity, with some placing the responsibility on local governments, and others on the federal government. However, a majority favored federal subsidies, either allocated to the states on an equal basis for reallocation to individuals, or allocated directly to higher education institutions on a quota basis. Respondents favored a broad set of educational offerings, spanning refresher courses, general and liberal education, vocational and professional training. One respondent wrote – perhaps in reference to the Smith-Hughes and Hatch Acts of the interwar period – that “We must avoid the mistake make after the last war of assuming only vocational education will be of value to military personnel.”

On the issue of the distribution of aid, a vast majority of respondents (107 to 21) opposed direct subsidies to institutions, favoring instead – by a majority of 183 to 4 – a system of aid to

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249 Ibid.
students. Many replies expressed strong feelings on this matter, but with just a few exceptions those who favored institutional subsidies believed that these should only be granted when the institution was asked to develop a special program to meet the specific needs of incoming students with disabilities connected to their military service. Some respondents favored a program that would be comparable to the National Youth Administration, with the determination of loan and scholarship recipients left up to the colleges and universities. There was a general feeling that aid to students should last between one and six years.

Although Francis J. Brown exercised his editorial license and expressed surprise that there was so little support for aid to institutions directly, it is perhaps not unexpected given the institutions’ wartime experience with government policies over which they had little control, including the Army and Navy Specialized Training Programs.\textsuperscript{250} Should such a program of aid to veterans be enacted, funds would flow to the colleges and universities indirectly, and – ideally – with little governmental control. When asked whether institutions should contract directly with the government to fulfill specific student quotas, as had been the case in the Army and Navy Specialized Training Programs, there was near-unanimous opposition to any such contractual relationships with the government, and all agreed that the individual student should be free to choose his institution. However, the respondents were anxious that only accredited institutions be eligible, and that no new institutions be “established by the government for this purpose.” A majority of respondents (55%) felt that such a program should be administered by the Office of Education, or by the Veterans Administration (27%), with the remainder split between preferring a new independent agency, the War Manpower Commission – with which the ACE had worked so closely throughout the war – or the states.

\textsuperscript{250} By October 1943, there were 212,528 men in the Army and Navy Specialized Training Programs, the Army Air Force, and the Navy Air Force, with 628 institutions participating in these programs. ACE data, September 1943.
In August 1943, the ACE reported excitedly on the Bolton Act, which would provide federal aid to students in nursing schools and tuition reimbursement for the schools themselves. “This is an important step,” the journal reported, “in the extension of Federal aid to civilian students.” The ACE participated in the formulation of the Thomas and Barden Bills, making their way through Congress in the spring of 1944, and the Clark Omnibus Bill that passed the Senate unanimously in March. These legislative actions would form the basis for the coming GI Bill, passed in June of that year – a program that would reshape the nation’s higher education system and would provide a critical framework for later interactions between higher education institutions and the federal government, including the watershed National Defense Education Act of 1958 that I suggest represents the culmination point of the national defense education story, and later the momentous 1972 decision, within the Higher Education Act reauthorization, to directly fund students rather than institutions.

The Camel’s Nose in the Tent – National Defense Education as a Persistent Rationale for Federal Aid to Education

In the summer of 1958, while S. 3187 – soon to become the National Defense Education Act – was debated on the Senate floor, one lawmaker, at least, was not buying the link between education and national defense. Strom Thurmond (D-SC) complained that the many programs proposed under the bill would have no direct link to defense, and even for those that did, there was no requirement that the beneficiaries of these programs would serve in any government capacity. There was nothing to stop someone from using the national defense fellowship to fund a doctorate in nuclear physics, Thurmond argued, only to become a stockbroker and “never thereafter utilize in the national defense one iota of his taxpayer-financed scientific training.”

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251 Higher Education and National Defense, no. 58 (August 18, 1943).
Thurmond was concerned that many of the programs that the bill would create overlapped with existing federal programs, and with one another. But it was the bill’s scholarship provisions that particularly irked the Senator, who refused to be hoodwinked into believing that the national defense would somehow benefit. “This bill, with its emphasis on grants and stipends, and with its unbelievable remoteness from national defense considerations, should be viewed for what it is – general Federal aid to education.”252 It was the camel’s nose poking into the tent of the federal budget – soon the entire camel would be through.

Thurmond’s concerns notwithstanding, the bill did pass, and federal dollars began to flow to the universities. The National Defense Education Act of 1958 added just shy of $200 million to the federal budget in 1959, and was indeed to reach a figure of one billion dollars in the first years of its implementation.253 Thurmond’s views, both in the official record and now with the hindsight of history, were indeed in the minority. More common were those of Thurmond’s colleague in the House of Representatives, Olin Teague (D-TX), who in 1951 had made the classically Democratic argument that education “is certainly the cheapest defense in the world today.” In his report on the GI Bill, Teague suggested that – like it or not – from the “many indications today, the federal government will be involved in education perhaps for several years to come.”254 Now, six decades later, Teague’s prediction and Thurmond’s fears have both come to pass. The federal government has a major financial investment in many areas of higher


254 “G.I. Education: Problems and Future Programs” (Olin E. Teague, Member of Congress from TX, Member, House Committee on Veterans Affairs, Chairman of House Committee to Investigate the Veterans Education Program), 84.
education, and the defense rationale for this spending has never entirely faded although it is less prominent now.

The 50th anniversary of the passage of the NDEA in 2008 was marked by a modest flurry of publication and attention. There were even calls for a “new NDEA” for the 21st century, the most visible of which was the legislation proposed by Senator Ted Kennedy (D-MA) in 2006. The bill, which died on the Senate floor, aimed to “modernize the education system of the United States, to arm individuals with 21st century knowledge and skills in order to preserve the economic and national security of the United States.”\(^{255}\) The language that was now being used had changed slightly – ‘national security’ over ‘national defense’, and with a more direct linkage to the economy– but the rationale and spirit of the proposed bill was an old one. Senator Kennedy’s 2006 bill focused on America’s alleged lagging global competitiveness in math and the sciences, engineering, and technology– calling this a “threat to our national security” akin to the educational emergency that was declared after Sputnik’s launch fifty years earlier.\(^{256}\) But this did not resonate as it had in 1958.

In some ways the need for a “new” NDEA is obviated by the fact that several of its provisions are still with us, including the Title VI program, which is the longest surviving original NDEA provision with a national defense rationale. In its initial formulation, Title VI of the National Defense Education Act was directly tied to the maintenance of national security and prosperity through the training of a globally competent populace, and the production of cadres of experts who could inform America’s foreign policy in the post-Cold War geo-political landscape. Sociologist Gilbert Merkx has characterized these two dimensions of the Title VI


\(^{256}\) Ibid., Long Summary, October, 2005.
mission as “broadening the base”—which refers to public education—and “sharpening the point,” which is what Merkx calls the legislation’s “expertise mission” (Merkx, 2010, p. 24). This mission of Title VI was reinforced by Congress in its 1998 reauthorization of the legislation, in its affirmation that:

> The security, stability and economic vitality of the United States in a complex global era depend upon American experts in and citizens knowledgeable about world regions, foreign languages, and international affairs, as well as upon a strong research base in these areas.

This, in essence, is the public mandate of this publicly supported program. It is a mission that has remained remarkably constant despite decades of change in the wider world. One explanation for the consistent relevance of this mission may be its rather broad and indirect formulation, in that it recognizes the necessity of a populace that is savvy in the ways of an international, interconnected world, but does not tie this in directly to the conduct of American foreign policy or the pursuit of security and economic goals.

Their unique federal funding makes the Title VI National Resource Centers a locus for public applause or attack as administrations change and political climates shift.²⁵⁷ In the post-9/11 era, the involvement of the U.S. military in Iraq and Afghanistan, much like our forays into the far corners of the world at the outset of World War II, has spurred concerns about our national preparedness in foreign languages. Suddenly, rather than Japanese and German, we were faced with a need for many more speakers of Arabic, Pashtun, and Turkic languages than our universities had been producing. University Title VI centers came under the microscope, first as the beneficiaries of increased attention and support, and later as a focus of a sustained

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Congressional attack on their relevance – led by Senator Tom Coburn (R-OK) – that preceded a dramatic cut in federal funding in 2011, from which the Title VI program is only now beginning to recover. More recently, Senator Coburn has been at the center of the debate on the National Science Foundation’s use of taxpayer money to support projects with a similarly indirect link to the national interest – especially those in the social sciences.

In Conclusion

The thorny question of accountability, which has changed little since Strom Thurmond’s querulous indictment of the NDEA’s scholarship provisions over half a century ago, has been a common feature of the programs of national defense education. Public funding, once taken, triggers a contractual exchange that requires recipients (whether these be higher education institutions, research organizations, or individual scholars) to on occasion prove that their work contributes to the public good. Title VI centers in our nation’s universities engage in an ongoing process of self-definition, constantly retooling their relationship to both the public and to the federal government, which is their primary financial resource and the largest consumer of their intellectual products. Ever present in this evolution is an awareness of the “mandate” of Title VI, and the original act that funded it—the link between education and security, however it is defined, and the expectation that the support of this program and others linked to it would result in the development of cadres of international area studies specialists whose knowledge would inform United States foreign policy and combat the nation’s parochialism.

This same mandate informed the passage of the National Security Education Act of 1991, signed by President George H.W. Bush in the final months of the First Gulf War. The National Security Education Act is perhaps the most significant post-Cold War investment in higher education for the purposes of strengthening national security. This act – often called the Boren
Act for its author, Senator David L. Boren (D-OK), who at the time was chairman of the Senate Select Committee on Intelligence and subsequently became president of the University of Oklahoma – is a significant iteration of the national defense education idea still with us today. Of the act’s creation, Senator Boren says – “we brought in all the old pioneers…[who] were there from the beginning with intelligence, helped start the CIA [and] helped us win World War II.258 As they had in the 1940s, these old pioneers emphasized the importance of foreign language and cultural capacity to the nation’s security, and the focus of the Boren Act has been to create scholarship, fellowship, and language training programs for undergraduates, graduate students, and higher education institutions. The Boren Act’s solution to the problem of accountability has been to prioritize U.S. government service for its alumni, specifically in the federal agencies with a national security mission. Title VI tackles the accountability question with an often cumbersome system of tracking alumni and reporting back to the Department of Education on their subsequent careers.

It is a difficult task to measure, over the course of an individual’s working life, the public’s ‘return on investment’ and its impact on the nation’s security now and in the future. This study has explored the historical development of a more compelling viewpoint through which to examine the return on the public’s investment in higher education – the argument made by educators in war’s shadow decades ago, that a broadly educated populace contributes to our national weal; that those original goals of Zook and the American Council on Education that were folded into the NDEA, goals of higher education access, competence in international languages and cultures, and a federal government that is invested in the strength of the nation’s

colleges and universities, have contributed to national security and will continue to do so in the face of conflicts to come. Zook, Brown, and other “old pioneers” – to borrow Senator Boren’s phrase – defined a vision of national defense education in action that was no less potent for never having been fully realized. As I have argued in this study, it was the efforts, led by the ACE, to ensure that higher education had a seat at the table in deciding how the nation’s campuses and educational resources would be utilized toward the nation’s defense that were significant. The years of World War II opened a window of opportunity for the higher education community to serve the war effort in a way that it had failed to do in World War I and – critically – to establish a rationale for federal support to higher education on the grounds of national defense that would be used successfully in the passage of the NDEA and other pieces of federal education legislation that define the higher education landscape to the present day.

Finally, exploring the ACE’s efforts during World War II to define a vision of national defense education in action, the study contributes not only to scholarly understanding of the participation of colleges and universities in World War II, but also attempts to help fill a gap in scholarship on the ACE itself and its energetic leader, Zook. With his short term as Commissioner of Education, and much longer term as head of the ACE, Zook is a figure who frequently appears in the story of national defense education and the 20th century American higher education experience more broadly. For that, he warrants a more thorough biographical study than he has received up to this point. However, this study offers insight into his aim to carve out a role for higher education in wartime that was at that point unprecedented, and to which the later development of national defense education policy owes a debt. Also significant were the attempts by the ACE – largely, I believe, due to the personal stewardship of Zook and Brown – to promote an inclusive platform that engaged the participation of women’s colleges,
teachers colleges, and historically black institutions in the formulation of a role for higher
education in World War II and after. Goals of equitable opportunity for students regardless of
economic level were folded into the early instances of federal direct student loans that this study
traces to 1940, and persisted in the GI Bill, NDEA, and Higher Education Act authorizations.
This study highlights the little-recognized role of the concept of national defense education and
its proponents in articulating and realizing a vision of federal support for education that would
contribute to the nation’s defense by broadly strengthening the American education system at all
levels, and, through programs of aid to students, opening avenues of educational opportunity for
a greater number of citizens. It is a persistent legacy, and a vital contribution to the present-day
experience of American higher education.
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University of California Special Collections, AR-185, Western Signal Corps, Album, August 1944.

The Race for Knowledge: The Soviet and American Education Reforms of 1958

Within weeks of the launch of Sputnik by the Soviet Union in the autumn of 1957, plans were being circulated on Capitol Hill for a bill that was to redefine the relationship between academia and the federal government and reverse a long-accepted pattern of federal disengagement from public education. The National Defense Education Act of 1958 (NDEA), signed into law by President Eisenhower in September of that year, authorized nearly $190 million in federal spending on education at all levels through ten titles, which ranged in focus from student loan programs, support of university-based international studies centers, and increased emphasis on math and sciences in the primary and secondary systems.\textsuperscript{259} The Soviet Union’s technological prowess, now tangible in space, fomented a sense that American capabilities lagged behind those of its Cold War adversary. A new focus on education at all levels was seen as essential to countering the Soviet threat. It was the role of education to push the boundaries of the nation’s concept of defense, and to prepare its citizens to compete in a world increasingly defined by advantages of human capital. The meaning of defense underwent a

\textsuperscript{259} The operable titles of the act were Title II (authorizing the provision of student loans); Title III (financial assistance for math, science and foreign language programs); Title IV (funding for graduate fellowships); Title V (funding for guidance counselors to identify gifted students); Title VI (funding for university-based foreign language and area studies programs); Title VII (funding research on the effective use of educational technologies); Title VIII (funding for vocational training for workforce readiness); and Title IX (establishing the Science Information Institute and the Science Information Council).
redefinition in this period, moving from a focus on economic, political, and military capacity to include the asset of an educated citizenry—one that would demonstrate the value of democracy to a changing world.

The NDEA ushered in an era of unprecedented federal involvement in and support for public education that was to define the Cold War period, and aid in constructing the concept of the “Cold War University.”\(^\text{260}\) It is not coincidental that it appeared less than one year after the Soviet orbiter sent scientists and lawmakers scrambling to find and fund a response, amidst a hue and cry of accusations that America had fallen behind. The ‘crisis’ that followed the launch of Sputnik and caused Americans to look closely at various aspects of American society – especially the educational system – is commonly cited as a catalyst of the NDEA’s passage. However, Sputnik’s launch also spurred changes in the Soviet educational system that did not go unnoticed by American educators and policymakers. Americans and Soviets emerged from the enormity of the Second World War into a new kind of conflict – one that would demand the extended mobilization of all sectors of national life. Education was the force behind technological victories and, critically, the medium through which national ideology was fostered and sustained. In 1958, both nations passed major reform education programs that would change the futures of their schools. This study presents an alternative perspective on the NDEA and the years leading up to its passage by positioning it alongside the major education reform program initiated by the Soviet Union in the same year, 1958, and exploring the interplay between the two reform programs and the contexts of the societies that they impacted.

The Cold War was a war of ideology, and herein lay the defense-related value of education. Historian John Lewis Gaddis has suggested that the central issue at stake in the Cold

War was how best to organize human society. It follows, then, that education might be considered a critical weapon in this battleground. Behind the accusations leveled at public education in the days following the launch of Sputnik loomed a vision of a shadowy ‘other’ – the Soviet education system, functioning behind the Iron Curtain, that Americans both respected and distrusted. In 1958, this education system was also undergoing a sweeping transformation. While the coalitions behind the NDEA were shepherding its somewhat labored passage through Congress, Moscow was poised to launch the most significant reform of the Soviet education system since the 1930s. In the spring of 1958, Soviet Premier Nikita Khrushchev had presented his vision of reform, which was supported in November by a public declaration by the Central Committee on “Strengthening the Relationship of the School with Life and on the Further Development of Public Education in the Country.” The reform platform was adopted by the Supreme Soviet in December of that year. The program called for a gradual abolishment of nearly all of the Soviet Union’s secondary schools within five years; instituted a mandatory transition into vocational and industrial programs after eight years of compulsory schooling; and sought to expand educational access to working-class students – fighting the ‘elitism’ that Khrushchev feared was increasingly endemic in the Soviet schools.

Although they were not directly catalyzed by one another, the launch of Sputnik was an immediate spur to each. It is not coincidental that the two movements toward reform took place in the same year, and in the shadow of an escalating Space Race. In the struggle for ideological supremacy that characterized the Cold War, education became a critical weapon in the Soviet and American ‘race for knowledge’ – a term coined by U.S. Commissioner of Education Lawrence Derthick following his official glimpse into the Soviet education system in 1956,

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which is recounted in the primary sources utilized in this study. In honing and redefining their schools to keep pace in this global competition, the two nations kept an eye fixed on one another.

At the time of the two reforms, scholars and policymakers alike recognized the futility of a side-by-side comparison of the Soviet and American education systems. Indeed, the two superpowers differed so significantly in their ideological bases, their bureaucratic structures, and their legislative processes, as to make a straight policy comparison fruitless. This chapter explores, instead, the interplay between the two reform programs, and positions them in the contexts of the societies that they impacted. Khruschev’s Theses have received very little scholarly attention, either in Russia or the United States. This study attempts to shed light on a reform that is little-known among American audiences, and open a window on an educational ‘battlefield’ of the Cold War that may expand our nuanced understanding of that most complex of conflicts. Toward this end, among the primary sources presented in this chapter is the public ‘discussion’ of Khrushchev’s Theses that appeared in the Soviet press in the autumn of 1958. In the 1950s, as now, education was a lively topic of debate. This study utilizes primary source materials from Soviet journals to convey the voices of Soviet parents, teachers, and factory workers firsthand – and American readers may be surprised at the diversity of opinion present in a seemingly monolithic society.

I argue in this study that the issues with which Moscow and Washington grappled, in these defining years of the Cold War, were not all that dissimilar. The two reform programs were – to borrow a term highlighted elsewhere in this study – ‘preparedness’ plans; plans for educating generations of students who would be able to function in a divided world, to promote the ideology of their respective nations, and to compete in a dramatically altered landscape of global power. Both sought to provide ideological training to the new generation, so that these
citizens might demonstrate the superiority of this ideology to the outside world. Both recognized the necessity of addressing a drift away from vocational education, if their nation’s industrial and military resources were to be maintained. Both worked to mitigate manpower shortages, and produce a technologically adept populace that could stand ready to meet the challenges of the atomic age. The answer to all, it seemed, was education. Education was the critical social institution that produced technological victories, fueled economic growth, and ensured a steady flow of skilled manpower, while fostering and maintaining the national ideology – whether this be democracy or socialism. Both Moscow and Washington recognized the strategic utility of education to these national aims, so critical to the Cold War. By shedding light on the little-known Soviet education reform program of 1958, and exploring its interplay with the American National Defense Education Act of 1958, this study offers a unique contribution to the study of American Cold War education aims and policy and offers insights into the ways in which the United States and the Soviet Union shaped their own educational systems – and one another’s – in this period.

Khrushchev’s 1958 Reform: Strengthening the Relationship of School and Life

Premier Khrushchev first announced his intention to reform the Soviet education system in May 1958. By November, the “Theses on Strengthening the Relationship of the School with Life and on the Further Development of Public Education in the Country” had been approved by the Soviet Central Committee, and published in the government mouthpiece, Pravda. Something of a press discussion followed – primarily positive, as was generally the case in the Soviet
Union, but with some dissenting voices that will make an appearance later in this study. In December, the Theses, having received the “unanimous approval and support of the workers” were enacted into law by the Supreme Soviet, the Soviet parliament. The education reform program encompassed by the Theses formed a core of the Seven-Year Plan for the further development of the Soviet Union, set to begin on January 1, 1959. The Theses affected all levels of the Soviet education system and included the kinds of changes that only a centralized system controlling every aspect of the society and the economy could make. Whereas the NDEA was thought to be a major step in the involvement of the United States government in public education, Khrushchev’s reform was built upon a level of state domination of the education system such as Washington had never known.

It is perhaps most useful to divide the key provisions of Khruschev’s 1958 reform platform, as follows:

<table>
<thead>
<tr>
<th>The Eight Year School</th>
<th>The first stage of secondary education should be a compulsory eight-year school to replace the present seven-year school. This is to be a combination general education and labor polytechnical school.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(To begin in Academic Year 1959-1960)</td>
<td></td>
</tr>
<tr>
<td>The Second Stage of Instruction (Three Paths)</td>
<td>The second stage of secondary education will either be: 1) preliminary vocational training + training in a school for working or rural youth 2) training in production through factory-mill schools or collective farms 3) training in a technicum where students receive full secondary education and a work specialization</td>
</tr>
<tr>
<td>Gifted Students</td>
<td>In addition to the above three options, schools for gifted children in music, choreography, and the fine arts are to be preserved. Graduates may enter directly into higher education.</td>
</tr>
<tr>
<td>Subject Areas of Special Focus</td>
<td>The study of foreign languages at all levels is to be dramatically improved. Special attention should be paid to the teaching of physics, mathematics, chemistry, drawing, and biology.</td>
</tr>
</tbody>
</table>

262 George S. Counts, Khrushchev and the Central Committee Speak on Education (Pittsburgh: The University of Pittsburgh Press, 1959).
Language of Instruction | Parents should be able to choose to send their children to schools where the language of instruction is not Russian, if that is their preference.

School Construction and Provisioning | More schools will need to be built to accommodate the eight-year compulsory system. In addition, all needy students are to be given food, clothing, and school supplies. Cost to be borne by the state budget, as well as funds provided by collective farms and cooperative organizations.

Preference in Admissions Policies | In admitting young people to institutions of higher learning, preference should be given to youth with a record in practical work, or from rural or working backgrounds.

Higher Education | University students are to undergo practical training in factory laboratories, construction bureaus, and agricultural experiment stations.

Humanities at the University Level | Humanities students are to spend 1-2 years working in the national economy while studying.

Teacher Training | Teacher training is to be significantly improved, particularly for secondary school teachers, in order to accommodate the new 8-year program.

Table 1.2: Key Provisions of Khrushchev’s 1958 education reform, adapted from the text of the reform as translated by George Counts (1959).

Following, as it did, the Seven-Year Plan implemented in 1959, the education reform program was to be fully completed by December 25, 1964. However, by the time of Khrushchev’s ouster in October 1964, scant progress had been made on implementing the reforms. Roy Medvedev has attributed this to a cold reception of the reform program among both urban and rural Soviet citizens – neither of whom were enthusiastic over the vocational tracking of their children – and to the significant expense of training schoolchildren in vocational trades, which “necessitated sizable financial investment and created problems both for the industrial enterprises and for the schools.”

Vocational education is a primary area of commonality between Khrushchev’s Theses and the NDEA. This focus on vocational education was conditioned by the environment of the early Cold War period, the experience of World War II,

and the demands of a new conflict that would, it seemed, be fought through a combination of technological prowess and ideological unity. Both programs, to a greater or lesser extent, reflected a sense that vocational education – the preparation of workers to meet the demands of the increasingly complex industrial age – was key to meeting the projected shortages in manpower and skilled labor that threatened to handicap protagonists in the Space Race. With the push to expand vocational education came a concurrent recognition that preeminence in the Cold War required the successful utilization of the full spectrum of a nation’s resources – particularly its human resources. Public funds were pledged, in both reform programs, to seek out and foster intellectual talent, wherever it might be found.

Vocational Education in the Soviet Experience

The early years of the Cold War were not the first point in history at which the United States and Russia had looked to one another on the question of education reform. Historian Herbert Kliebard has noted that the vocational education movement in the United States was catalyzed and shaped by a Russian exhibition at the 1876 Centennial Exposition in Philadelphia.\textsuperscript{264} The so-called “Russian system” on display at the Exposition was a graded exercise in the use of various tools developed by Victor Della Vos, which had been implemented at the Imperial Technical School in Moscow since 1868. Della Vos’s exercises were displayed at the exposition, where it was seen by John Runkles, then the president of the Massachusetts

Institute of Technology. Within a year, Runkles had opened his School for Mechanic Arts, a secondary program that emphasized instruction over production. What the Della Vos system represented, according to Kliebard, was a “viable school-based alternative to the apprentice system.”

In spite of Runkles’s effort, this alternative method of training vocational and industrial laborers within a system of general education would continue to elude American and Russian educators alike for the better part of the next century – a tension that is present in the 1958 education reform programs of each.

Vocational education formed the core of Khrushchev’s 1958 education reform. It was the vehicle through which the ‘tie between work and life’ could be strengthened, and the manpower demands of the Soviet Union’s ambitious industrialization program could be met. In many ways, the Khrushchev reform hearkened back to Lenin’s early position, immediately following the Russian Revolution. George Counts, a scholar of comparative education who visited the Soviet Union in the late 1920s, noted Lenin’s emphasis on the necessity of “bridging the gap between theory and practice, between mental and physical labor.”

In advocating for a clear relationship between learning and labor, Lenin drew upon Marx’s prescription that education, where possible, should be combined with industrial production. Vocational education, having been pioneered in the imperial Russian education system in the mid-19th century, was a fixture of the social infrastructure that was inherited by the Bolsheviks in 1917. Immediately following the Revolution, vocational education was separated from the general education curriculum, and new

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265 Kliebard, Schooled to Work, 4.

266 Counts, Khrushchev and the Central Committee Speak on Education.

vocational institutions were established under the Commissariat of Education. These new, specialized institutions spanned the educational spectrum, from elementary to higher education levels, and focused on individual trades – like factory work. Larry Holmes has speculated that Lenin, and certainly his wife Nadezhda Krupskaya – who took a special interest in education – hoped, with time, to eradicate the system of separate vocational institutions in favor of a unified education system\(^{268}\) that would teach the ‘theory’ of labor through a polytechnical curriculum.

Lenin’s Party Program of 1917 had called for the provision of “free and compulsory, general and polytechnical education”\(^{269}\) for Soviet girls and boys under the age of sixteen. A system of polytechnical education was introduced by central directive in 1918, as part of the Unified Labor School – a nine-year, co-educational program that emphasized theoretical and practical labor training. Holmes has noted that the aim of polytechnical education was to familiarize students with the “basic processes and tools of agriculture and industry,”\(^{270}\) rather than providing the more narrow training in a specific vocation that was the aim of the specialized vocational institutes. The combination of education with labor formed the foundation of the concept of polytechnical education, which was officially recognized by the Party in 1919, with the implementation of a new requirement that such education programs would now be provided to all students up to the age of seventeen. Scholar of education John Lauglo has written that it is the emphasis on participation in production, and the linking of learning to production (particularly in the sciences), that distinguishes polytechnicism from other programs of general


\(^{269}\) Cited in Lauglo, 292.

\(^{270}\) Holmes, 354.
education that were undergoing change, worldwide, in this time period. This linkage, Lauglo notes, was gradually deemphasized as the Party’s programs coalesced.271

Soviet education in the late teens and early 1920s reflected a broader trend of experimentalism that prevailed in the years leading up to the first Five-Year Plan in 1928 and Stalin’s eventual consolidation of power. The Unified Labor School, with its more ecumenical polytechnicism, went the way of other Dewey-an experiments embraced by Krupskaya in this early period. With the demands of an economy ravaged by years of civil war and a frenetic plan for wholesale industrialization came a more direct approach to pure vocational training that would churn out skilled manpower on a massive scale. As the Party increasingly sought to align education with economic targets, child-centered and experimental teaching approaches were sidelined in favor of rigid subject mastery and a standardized curriculum. Schools, Holmes has written, were becoming “factories for factories.”272 Pure vocational institutions, entities separate from the general education curriculum, began to reappear in response to the labor shortages that appeared to threaten the implementation of the first Five-Year Plan. By 1930, the death knell of polytechnicism had sounded – and with it the dream of a curriculum in which students would acquire knowledge through an intimate familiarity with manual, ‘socially useful’ labor. It is this dream that Krushchev’s 1958 program sought to revivify, as the Party feared that the education system it had initiated decades earlier had drifted too far from the values of Lenin and Marx.

That this combination of vocational and general education, on an institutional level, was an experiment that could offer lessons to the international education community was not lost on

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272 Holmes, 359.
American observers. Soviet expert and economic historian Arcadius Kahan speculated in 1960 that,

The newest reform in Soviet education will contribute to further improvement in educational preparation of trainees as a result of the eight-grade requirement preceding transfer into vocational training. It will also, in a curious way, close the ring of the paths along which general educational and vocational training have traveled separately during the last forty years. The Soviet Union has now come back, at least in pronounced intention, to a system of education which embodies the idea of integration of general and vocational education. It is for the future to judge the advantages or handicaps which such a system provides for the material and intellectual development of a society.273

Because Khrushchev’s reform ended with his tenure in power, and were never fully implemented, the ‘future’ did not have a chance to judge the efficacy of such a system. American educators, however, were watching.

Expansion of Educational Opportunity – Two Paths to a Shared Goal

In addition to their shared focus on vocational education, the Soviet and American education reform programs shared a point of intersection in the goal of expanding educational opportunity to a broader portion of the population. The widening of educational opportunity was a common trope in Cold War education discourse in the United States, and contributed to the rationale behind the passage of the National Defense Education Act in 1958 – paving the way, as some scholars have argued, for the Elementary, Secondary Act, and the Higher Education Act of 1965.274 Although vocational education was a core feature of the ‘national defense’ curriculum that had evolved in the United States since its origin in the early mobilization for World War II,


an argument took shape in the late 1940s and early 1950s that it was less ‘democratic’ than a 
general or liberal arts education.\(^{275}\) In the ideological test of strength that characterized this 
period of the Cold War, education underwent a critical examination – on both sides of the 
struggle – for its utility in imprinting students with the dominant values of their respective 
societies.

This left vocational education in the United States in an ambiguous position in the decade 
following World War II, as Brint and Karabel have noted. On the one hand, it offered a solution 
to the looming manpower shortages that were publicly and vigorously decried by Admiral 
Hyman Rickover and other prominent voices from military, industry, and policy circles. 
Following the launch of the *Sputnik* satellites, while the United States struggled to respond with 
an orbiter of its own, these arguments increasingly highlighted a disparity in such highly skilled 
professions as aerospace engineering and applied physics. Never far on the heels of these 
warnings were concerns that a narrow focus on the subjects seen by some to be most relevant to 
regaining America’s competitive advantage in the Space Race would compromise the breadth of 
subject matter and the emphasis on critical thinking that were the hallmarks of a liberal 
education. It was precisely this liberal curriculum, others claimed, that was best suited to 
reproducing in future generations the values of a democratic society. In the decade preceding the 
passage of the NDEA, influential architects of education policy – including Harvard’s elder 
statesman, James Bryant Conant – pushed Washington to further educational opportunity 
generally as a means of preserving the nation’s ‘human resources’ and ensuring that no 
promising talent would go to waste.

\(^{275}\) Steven Brint and Jerome Karabel, *The Diverted Dream: Community Colleges And The Promise Of Educational 
Opportunity In America, 1900-1985* (Oxford University Press, 1993), 76.
This, ultimately, was an argument for the meritocratic fostering and selection of students perceived to be exceptional, regardless of their background or family means. It had formed a core recommendation of the Truman Commission’s 1947 report, *Higher Education for American Democracy*. A decade later, it featured prominently in the language and functions of the NDEA –

The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women. The present emergency demands that additional and more adequate educational opportunities be made available. … We must increase our efforts to identify and educate more of the talent of our Nation. This requires programs that will give assurance that no student of ability will be denied an opportunity for higher education because of financial need.

The survival of American democracy was linked to the broadest possible search for talent. In the NDEA, the federal government extended a helping hand – long awaited by the professional education community – to students who could not otherwise afford to pursue continuing studies and, it was thought, attain their full potential in the service of the American way of life.

Given the *zeitgeist* of the period, it is perhaps not surprising that, an ocean and a continent away from Washington, the Soviet Union was also linking the notion of educational opportunity to the superiority and longevity of its ideological foundation. In the Soviet case, however, movement in this direction was characterized by fear of bourgeois influences on the education infrastructure that drew much from the Party platforms of preceding premierships. Khrushchev’s 1958 reform program sought to rectify a growing ‘elitism’ that the Party leadership viewed as prevalent in the Soviet education system, particularly in institutions of higher education. The language of the program reinforced a return to Marxist-Leninist principles that rested on the nobility of the worker, and the rectitude of a close connection between mental

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and physical labor. As Counts suggested,

Marxist teaching dissipated the bourgeois legend of the inevitable and everlasting existence, on the one hand, of the drab mass of people, whose lot is subordination and heavy physical toil, and on the other, a handful of people who allegedly are destined by nature itself to think, to govern, and to develop science, literature, and art. The experience of the Soviet Union...[has] demonstrated that the toilers...can govern a state, not worse, but better, than the exploiters, and that they can develop the economy, science, literature, and art at unprecedented rates.\(^{278}\)

This phenomenon, too, has its roots in the 1920s, and the shift away from polytechnicism toward a system that emphasized mastery of academic subject matter. In 1920, the Party had instituted a series of policies in admissions and student aid, at the higher education level, that favored applicants of ‘proletarian’ or ‘peasant’ origins.\(^{279}\) With the heightened focus on general studies that came into vogue later that decade, however, came a new drive to favor more traditional measures of achievement in admissions policies. The somewhat quixotic practices of the early Revolutionary period, Holmes has argued, gradually fell away as the Party leadership faced the policies that would be necessary to propel the fledgling socialist federation into parity with the high standards for literacy, education, and industrialization of the Western powers. It was this early spirit that Khrushchev sought to recapture, in promoting his 1958 education reform.

However, while some commentators in the United States questioned the suitability of vocational education for democracy, there could be no mistaking its ready application to the advancement of socialism in the Soviet Union. Vocational education, then, was the tool through which Khrushchev would construct a social landscape of expanded educational opportunity while also meeting the economy’s human resource needs. For Khrushchev, operating within the socialist system, vocational education served an ideological focus as well as a pragmatic one.

\(^{278}\) Counts, 33.

\(^{279}\) Holmes, 353.
That Khrushchev’s efforts at educational reform relied on a reorientation toward vocational subjects, and the dismantling of a system perceived to favor children of the elite, might be read as a response to what Senator Henry M. Jackson called the ‘Soviet dilemma.’ A longtime Democratic congressman from Washington state, Jackson (1912-1983) espoused a number of foreign policy positions, and was a co-sponsor of the NDEA. His views on the Soviet Union were informed by several official visits, beginning in 1956. At the heart of Jackson’s Soviet ‘dilemma’ idea were the Soviet Union’s ambitious targets in economic, industrial, and technological advancement – all of which required a literate, educated populace. And yet herein, Jackson suggested, lay the seeds of the Soviet Union’s own demise. An educated populace, able to think critically about its own standard and style of living, would begin to ask potentially dangerous questions about each. These questions would lead to demands for change that would ultimately topple the totalitarian system under which Soviet people labored. “To win this race,” Jackson told a Boston audience in 1957, “they [the Soviets] need good scientists and engineers. They must educate their people.” But, “with the growth of Soviet education – with more minds trained to be curious – doubts spread about communist philosophy and practice.”

Jackson’s was not an isolated view, but rather drew upon a larger Cold War consensus that totalitarian regimes simply could not produce the kind of innovation and creativity that were the hallmarks of ‘democratic science.’ Aaron Friedberg has suggested that the ‘dilemma’
affected both sides in the Cold War, and was in fact conditioned by the level of centralization of the two superpowers. That same level of intensive state centralization that allowed a totalitarian system, like the Soviet Union, to “extract human and material resources in such quantities from their own societies also tended, in the long run, to suppress their capacity for innovation.” Democratic societies, on the other hand – with latitude for political expression, and free markets – found it more difficult to support vast defense forces, but were “better equipped to undertake a race for technological advantage.”

Jackson encapsulated this paradox in an April, 1959 speech to the National War College: “The central issue of our time is this: Can a free society so organize its human and material resources to outperform totalitarianism?” The answer, for most key voices in American education and policymaking circles, was yes. Although this belief suffered some setbacks with startling Soviet technological victories in the 1940s and 1950s – chief among these, the rapid development of the atomic bomb, and the launch of the Sputnik satellites – it remained a central tenet of Cold War policymaking in the United States, and is present in the education legislation that emerged in America in 1958.

*The Jackson and Derthick Exchanges: Unshaken Confidence*

This central belief that democratic values would ultimately prevail over a formidable but totalitarian foe featured prominently in the reports of Senator Henry Jackson and Commissioner perceived strength of ‘democratic science’ was advocated in the early 1940s, and beyond, by Vannevar Bush, the doyen of Cold War science policy.

282 Ibid., 304.

283 Quoted in Stuart, 252.
of Education Lawrence K. Derthick, whose official visits to the Soviet Union expanded Americans’ view of an adversary that had largely remained an enigma. Jackson reported on his month-long visit to the Soviet Union, in the summer of 1956, in a series of articles for the Seattle Post-Intelligencer. Through his narrative reports, Jackson emphasized his concerns that the Soviet Union was making its great strides in domestic production and military buildup at the expense of its people’s standard of living. He warned readers, however, that the visible poverty on which he reported should not be taken as an invitation to underestimate the Soviet foe. One must remember, he wrote, that

…this is the nation that produced the H-bomb long before our experts thought it would. This is the nation that may be leading the United States in the race for the ballistic missile. This is the nation that threatens to overtake us in military airpower. …[T]he Soviet Union is making gigantic industrial strides – by reason of vast natural resources, by educational emphasis on the sciences, by sheer determination, and by wringing it out of the hides of its people.

This is the general tenor of Jackson’s account: that the Soviet Union is not the “paradise for workers that it purports to be,” but that this should on no account cause Americans to lapse into a self-satisfied state of complacency. Although Jackson notes an emphasis on science education in the Soviet schools, his main concern is with an apparent state of class segregation that becomes apparent to him while in the Central Asian cities of Alma Ata, Tashkent, and Samarkand. Jackson questioned the notion that the Soviet system has erased class consciousness, noting the practice of operating separate schools for native Central Asians, and those of ethnic Russian background. This same practice of maintaining separate languages of instruction in public schools, however, was strengthened in Khrushchev’s 1958 education reform where it was

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285 Ibid.
promoted as a means of giving parents a more ‘democratic’ choice in their children’s education.\textsuperscript{286}

A far more thorough overview of the Soviet education system was provided by Lawrence Derthick following an official visit to the Soviet Union by a delegation from the United States Office of Education in the spring of 1958. The timing of this visit was significant, coming as it did in the wake of Khrushchev’s announcement on the Soviet education reform, and in the midst of a critical period for the NDEA as its proponents sent it through Congress. In his account, Derthick steers away from direct comparisons between the two education systems, and in fact notes at several points that such a comparison would be impossible. His narrative is, however, peppered with intimations that the United States would do well to keep a watchful eye on advances in Soviet education. Writing in response to Khrushchev’s 1958 reform program, Derthick suggests,

\begin{quote}
If Soviet society in the next 3-5 years enters into an intensive “tooling-up” period, would the increased technical and scientific competencies that might ensue therefrom have implications for education in the United States? Certainly the course of Soviet education reforms…should receive deserved attention from competent observers in the years ahead. Experiences of recent years instruct us to remain alert to and informed about educational developments abroad.\textsuperscript{287}
\end{quote}

There can be no doubt that these ‘experiences of recent years’ included the United States’ unpreparedness and embarrassing failed responses to the Soviet Union’s launch, in rapid succession, of two earth-orbiting satellites. Although Derthick’s account is measured, there was little such reservation in the American press following the launch of the \textit{Sputniks}.\textsuperscript{288} At that time,

\begin{quote}
\textsuperscript{286} Counts, 46.
\textsuperscript{288} \textit{Life} magazine, for example, published a five-part series in March-April, 1958: “The Crisis in Education.” Part I is devoted to the type of direct comparison between Soviet and American schooling in which commentators like
the American education system came under a level of scrutiny that it had scarcely witnessed previously, and the Soviet system garnered praise from several quarters of American society.

**American Education Under Fire**

Decades before Americans felt the ominous cadence of *Sputnik* as it made its way across the sky, some had warned that the education system that the Bolsheviks had constructed could present a major challenge to the Western powers. In 1930, George Counts warned that, in coupling a system of public education with a centralized planning superstructure, the Soviets had “forged an instrument of extraordinary power.”\(^{289}\) It is possible, he suggested, that one day in the future, Americans

shall find that our present practice of placing our confidence in the uncoordinated efforts of separate enterprises represents the last word in human efficiency; possibly we shall find that the society which endeavors to plan its future has a tremendous advantage over the society which entrusts its future to the fates.\(^{290}\)

In the autumn of 1957, it appeared to many that that day had come. In the weeks following the launchings of the *Sputniks*, Americans cast about for an explanation that would satisfy questions on how the nation had fallen behind in the Space Race. A growing consensus pointed to the nation’s educational system as the culprit. In pointing to education, the American public and policymakers alike were treading a well-worn path that had earlier implicated the public education system in the inadequate intellectual preparation of draftees in World Wars I

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Derthick were reluctant to engage. Although inflammatory, the series reawakened a debate over American education that was crucially timed for the passage of the NDEA. It also suggested, as others were doing at the time, that so-called so-called Progressive education was to blame for America’s educational shortcomings.


\(^{290}\) Ibid., 29.
and II. In the 1950s, however, the concerns over public education that emerged from the *Sputnik* crisis were successfully channeled into the passage of a large-scale federal aid to education program – a coup that had eluded proponents of federal aid to education for long decades. As historian Barbara Barksdale Clowse has summarized, once the *Sputnik* panic evolved into “an educational crisis, it coalesced with the long and hitherto inauspicious struggle for federal aid to education,” and became a law.291

The response of American educators to the launch of the Soviet satellites was more measured than voices, like those of the flamboyant and hawkish Admiral Rickover, that prevailed in the popular press. Public figures, like education commissioner Derthick, hesitated to make direct comparisons between the American and Soviet education systems, preferring instead to acknowledge the successes of the Soviet system while reminding the public of significant weaknesses that such a centralized, totalitarian system presented. Most urged caution, reminding the nation that Soviet values were not American values – and that Soviet forms of education could not, and should not, be adopted wholesale in the United States. Still, the Cold War sense of education as a weapon did not leave the discussion; and American educators did not shy away from issuing warnings of their own. Typical of these responses is an essay by Arthur H. Moehlman, a professor of history and philosophy of education at the University of Texas, and a specialist in comparative education. Writing in the *Phi Delta Kappan* in November, 1958, Moehlman called education “the most strategic weapon for any country in meeting the challenge of its time.”292 Nonetheless, Moehlman urged the necessity of a thorough understanding of both

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291 Clowse, 4.

the American and the Soviet education systems, grounded in a historical perspective, which should inform any inquiry into the fitness of either system for meeting the demands of the atomic age. Moehlman elaborated an idea, fairly common in the discourse of professional educators in this period, that the goals and values of American and Soviet education were irreconcilably different – and that the task of American education, in this equation, was more complex. The “principal aims” of the Soviet schools, to paraphrase Moehlman, were limited to education for scientific materialism, the fundamentals of production, physical fitness, aesthetic appreciation, and socialist values. To achieve this more focused set of educational goals, the Soviet Union “was willing to expend a great deal of money and effort” – with the success of the system visible in Soviet attainments in space.²⁹³ The task of the United States, on the other hand, was to educate a widely heterogeneous population in a broad array of subjects, all with the ultimate goal of maintaining and amplifying the diversity that was the nation’s greatest strength. “The strength of US education,” Moehlman argued, “is in its democracy and its diversity.”²⁹⁴ A truly universal education – a fusion of liberal, general, and vocational curricula, with a high degree of freedom of choice – was the hallmark of this system. Given these conditions, it would be impossible for the United States and the Soviet Union to achieve parity in their educational systems – and among educators like Moehlman, there was little desire to do so. “Such a system here,” warned Dr. Milton Eisenhower, brother to the president, “would violate all our democratic concepts.”²⁹⁵

²⁹³ Ibid., 79 (emphasis in the original). Moehlman’s argument reflects a larger push for continued federal aid to public education following the passage of the NDEA.

²⁹⁴ Ibid., 86.

Still, American educators were cognizant of the strength of the Soviet education system, and were not always as sanguine as Moehlman in their comparisons. Following a five-week visit to Russia in September, 1958, under the auspices of the Comparative Education Society, Murray Lincoln Miller noted that,

Like other educators visiting Russia, the Comparative Education group was tremendously impressed with, and somewhat frightened by, the Soviet willingness to devote so large a share of the state’s resources to education. Russia is determined to outstrip America economically and scientifically, and her prime tools are the schools.296

Miller was aware of the Soviet education reform that was under discussion at the time of his article’s publication, and positioned it as a competitive effort, arguing that the Russians “would like to see us relax our efforts to improve American education.”297 The American press of the time reflects a high degree of awareness of the Soviet education reform program that was not limited to circles of professional educators like Counts, Moehlman, and Miller, or to policymakers like Derthick who had firsthand experience of the reforms. Shifts that were taking place in the Soviet education system in the prelude to the Central Committee’s November announcement were covered in The New York Times, and reporting continued as the program was publicly discussed and ultimately adopted.298 It is not surprising that in 1958, in the midst of what Moehler characterized as a second ‘educational awakening,’ Americans were far better informed of the activities of their Soviet counterparts than were the latter about changes in Washington. Khrushchev’s education reform was accompanied by an extensive discussion in the Soviet press; but it was not informed by the American experience.

297 Ibid., 81.
‘Fervent Approval’: The *Izvestiia* Discussion

For just over one month in November-December, 1958, the Soviet journal *Izvestiia* published a public discussion (*obsuzhdenie*) of the proposed education reform program. Although we have only unofficial (and very likely inflated) government estimates for the scope of the national discussion that the *Izvestiia* publications reflected, it appears to have been fairly broad. In February, 1959, I.A. Kairov – President of the Russian Republic’s Academy of Pedagogical Sciences – reported with characteristic hyperbole that,

> The discussion of the theses on strengthening ties between the schools and life has become truly nationwide in scope. According to incomplete preliminary data, 199,000 meetings attended by more than 13,000,000 persons, at which over 800,000 persons spoke, were held in the Russian Republic. 299

An *Izvestiia* correspondent in Penza, covering a discussion of the reform program held in School Number 11, attested that 120 people crowded into the auditorium where the discussion was held, and engaged in one of the more lively debates that the school had seen in some years. Regardless of the actual figures, the reporting by *Izvestiia* and other Soviet journals reflects a public consideration of the proposed education reform program that was both expansive and spirited. It will come as no surprise to any scholar familiar with the Soviet press that, as the official publication of the USSR’s Supreme Soviet, *Izvestiia*’s reporting trended toward the fervent and laudatory in response to this and other government proposals. However, through its publication of Soviet citizens’ letters, the journal presented a moderately diverse set of public

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viewpoints – some of which express, or make reference to, dissenting opinions. As with so many issues in Soviet history of this period, it is often necessary to read between the lines of what is being said – and what is being implied – in order to arrive at conjectures on the ways in which the program was received by Soviet citizens in the autumn of 1958.

Because policy is adopted at the level of the state and experienced at the level of the individual, a holistic policy evaluation – whether historical or contemporary – takes into account the stakeholders influencing or impacted by that policy. In the case of education policy, the array of stakeholders involved in the process can be as broad as society itself. In the Soviet example, in which general education was to be brought into a closer relationship with industry, this circle of stakeholders expanded across professional sectors – a phenomenon that is represented in the Izvestiia discussion. In the letters and opinion pieces, the voices of students, teachers, parents, and pedagogical scholars mingle with those of machinists, metallurgists, factory foremen, and laboratory scientists. Through this intermingling, the contours of a policy debate emerge. It is perhaps an interesting footnote that, in contrast to the NDEA – which was debated in the houses of Congress, but did not receive a significant amount of public attention before its passage – the Soviet education reform program was apparently discussed at the local level in schools, universities, factory sections, Communist youth (Komsomol) groups, and in ‘kitchen conversations.’ Although there was broad consensus that the Soviet education was in need of reform – and, according to some, had been so for quite some time – there were disagreements on how this should be accomplished.

One area of concern for some was whether vocational education would be emphasized to the detriment of a traditional general education curriculum. A group of educators in Kiev gently warned, through a collective letter to Izvestiia, that equal instruction hours must be devoted to
history, languages, and literature as to mathematics, physics, and the natural sciences. In a rare criticism of the schools for working youth, the educators cite examples of poor literacy and ill-preparedness in the humanities among the students emerging from these institutions. “It is not possible to become a budding worker,” they contend, “without sufficient literacy, without a broad cultural overview.” The educators repeat a trope, found frequently in the public discussion, that a grounding in the humanities helps to cultivate a love for labor. In another letter, however, an engineer recommends that more pedagogical hours be devoted to mathematics, physics, chemistry, and theoretical mechanics – the very subjects thought to have ushered in Soviet technological successes.

Concern over the fate of the humanities appeared frequently in the Izvestiia discussion, and represents one of a very few areas where parents’ fears about the education reform may be seen. Although Izvestiia reports that parents approved the program ‘with one voice,’ the new program would – in effect – have sent their children into difficult and potentially dangerous factory work as young adolescents. Further, the industry could not be determined by the parents or the children, but was assigned based on geographic proximity to the factory. One can imagine that this was not a pleasant thought for many parents. Tensions were evident among parents at Kalinin’s Middle School No. 1, where K. Riumina, a spokeswoman for the parents’ committee, reported that

Many parents speak in favor of the preservation of schools for children who are gifted in music, dance, and the arts, but at the same time oppose special schools for young people who are gifted in math, physics, chemistry and biology. They feel that this will be a loophole for those who want to protect their children from factory work.\(^\text{301}\)


Expressing a divergent view, a father in Gor’kii credited a cooperative program between local schools and a nearby auto factory with awakening in his daughter, Galina, an “interest in factory life that wasn’t there before.” This newfound interest, he writes, “brings me joy.”

The Gor’kii experience points to an important feature of the Soviet education reform program. Although certainly a ‘top-down’ policy in the sense that it was centrally conceptualized and directed, there is a ‘bottom-up’ element to the program, in that it was preceded by local-level initiatives that were significant enough to draw the attention of school districts across the Soviet Union. In these initiatives, school and industry leaders collaborated on cooperative programs that brought students into factories and laboratories for curriculum augmentation and skills training. Contributors to the Izvestiia debate make mention of these initiatives, with the Urals region garnering the most frequent attention. In the case of the Urals town of Nizhnii Tagil, this initiative was taken by the Komsomol, which began sending two university students each day for work in the local metallurgy plant. This program was not without its detractors. Resistance came from faculty in the metallurgy department at the Urals Polytechnical Institute who, according to one young engineer who participated in the program, feared that “work at hot furnaces would interfere with one’s studies.” For this student, however, “this practice was as necessary to us as air.”

Expressing a concern that is addressed in the reform program, he worried about an over-reliance on texts in vocational education, and an under-utilization of learning through practice. The fate of Soviet technological and economic power lay in its ability to efficiently man a labor

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force, as well as to foster the type of scientific brilliance that produced the startling inventions of 1957.

Americans may have been surprised at the Soviet reaction to the *Sputnik* launch, as reflected in the education reform debate. Although certainly celebrated as a success, the warnings against the danger of complacency prevail. The language of the education reform program itself recommends that Soviet citizens not ‘rest on their laurels,’ but instead push forward in bringing about ever more improvements to the educational system that had produced these Space Race victories.\(^{304}\) Some Soviet citizens worried that, just a year after the launch of the satellites, youth had already become mired in this dreaded complacency – or worse – ambivalence. V. Shilkin, a public safety officer in Vinnitskaia oblast, wrote with concern that,

> Young people, by and large, want to be engineers or scholars, and consider factory professions to be old news. When they come into the real world, they see that everything doesn’t happen easily, and that they don’t have sufficient capabilities or willpower to achieve what they desire.
> -- But the satellites were made collectively, with scholars working closely with laborers, you explain to them.
> -- That’s ancient history! Comes the reply.\(^{305}\)

As in the Kalinin parents’ debate, the shadow of the ‘elitism’ addressed in the education reform program is present in Shilkin’s lament. The press discussion reflects a sense that the Soviet education system should move away from a tendency to preference higher education over manual labor. Also evident is a concern – shared, it seems, by Khrushchev – that it wasn’t always ‘the right’ students who made it into higher education. A retired schoolteacher in Cheliabinsk argued that higher education should favor students who have “worked toward it, and

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\(^{304}\) It should be noted that Counts, for one, took issue with this idea. In his *Khrushchev and the Central Committee Speak on Education* (1959), he argues that it was in fact the Imperial Russian and early Bolshevik school systems that produced the physicists responsible for the *Sputnik* satellites.

\(^{305}\) V. Shilkin, *Izvestiia*, no. 275 (November 18, 1958), 2.
chosen it consciously (soznatel’no), and not by happenstance (ne sluchaino). These latter were the bourgeois trappings of the old regime.

For a long time now, not all young people who attain a secondary education seek higher education out of a desire to be enlightened in a particular science, because they have a calling for it. Some young men and women dream of entering the university because they imagine that this will ease their way in society, or give them the opportunity to lead. These views are, undoubtedly, holdovers from the older society, in which there was a deep divide between physical and mental labor.\footnote{V. Shtrashnov, “Trud – v osnovu vospitaniia,” Izvestiia, no. 288 (November 23, 1958), 2.}

At issue in the elitism question was a disagreement over the uses of the university. As in the case of vocational education, the education reform program advocated a pendulum shift back toward much earlier Marxist ideas on the purpose of education.

The Soviet reform program represented a wholesale restructuring of the public education system, across all levels, in a way that the National Defense Education Act in the United States did not. Still, both policies opened the door to a much broader set of debates on education than their authors likely anticipated. With such a sea change underway, many other improvements seemed possible. In the Soviet Union, the advent of the reform program was seen as an opportunity for new pedagogical methods to be implemented, and for teacher training to be overhauled. Domestic science came up, with calls for its inclusion in vocational training programs and suggestions that it be taught to boys as well as to girls.\footnote{Domestic science, and home economics, has long had an uneasy relationship with vocational education. Maresi Nerad has chronicled this phenomenon, in the United States, in her study of the UC Berkeley’s home economics program, \textit{The Academic Kitchen} (New York: SUNY Press, 1999).} The old polytechnical debate of the 1920s was revived in questions over whether schools should merely impart a “love for labor” (as many suggested), or should focus on a specialization – with the potential, in the process, to shortchange the general education curriculum. Present also were questions of the
extent to which schools should educate for morality and character – a concern that was echoed in the United States at this same time, and in previous decades. As in the United States, the question of funding for school construction arose in the wake of the reform program’s publication.\textsuperscript{308}

The United States itself, however, was largely absent from the Russian discussion of the Soviet reform system. Issues of economic competitiveness, so prevalent in the American press, did not feature prominently. One area in which the United States did receive mention was in a rather bold criticism of one area of the program: the age at which instruction should begin. Whether the age of school entry should be fixed at seven or eight years of age was an issue of much contention in the Soviet reform program. Those falling more heavily in favor of direct vocational instruction felt that the age should be pushed back to 8, so that children would be more physically and mentally developed at the time of their first factory experience. Others were concerned that this would cause the Soviet Union to fall behind in literacy and academic competitiveness. A member of the Russian Federation’s Academy of Pedagogical Sciences, B. Esipov suggested that,

\begin{center}
If we hold students back to be more developed for physical labor, we will be setting our system back. It is worth noting that in Europe, in several Asian countries, and in the United States, schooling begins at 6. In Great Britain, it begins at 5.\textsuperscript{309}
\end{center}

Using the example of the USSR’s critical opponents and allies in the Cold War, Esipov forcefully argued for improved literacy education in kindergarten and pre-school settings. The

\textsuperscript{308} Similarities on certain questions of education between the United States and the Soviet Union – many of which have been noted here – were recognized by American observers at the time. Dr. Gerald Read of Kent State University, and Dr. William Brickman of New York University, discussed many of these similarities in the American press upon their return from a visit to the Soviet Union in December, 1957. Read and Brickman focused on parity in questions of educational access; student preference for vocational or liberal education; school construction issues; ideological training; and larger questions of who should be educated, and how this should be done. Gerald Read, “Soviet Educators Have Problems Too,” \textit{Phi Delta Kappan} (June, 1958): 386-388.

views of the Central Committee aligned with Esipov’s on this issue, and the schooling entry age
was set at 7. This was something of a victory for those who advocated a more measured shift of
the Soviet education system into vocational training; nonetheless, the Khrushchev reform
program was adopted, largely unchanged, just one month after the Central Committee opened the
floor to public comment.

Five Years Later

The five years that followed the passage of the Soviet and American education reform
programs of 1958 proved critical in both cases. Students in 1959, the first year of the NDEA’s
implementation, came back to school in September to find an altered classroom and changes in
their curriculum. As the years progressed, they would encounter growing opportunities for
international education at the university level, and expanded resources for funding their graduate
studies. After its first four-year run, the NDEA was reauthorized. What Eisenhower had initially
hoped would be a short-term, ‘emergency’ program had become, through the efforts of educators
and lawmakers, a permanent federal investment in public education. With its incorporation into
the Higher Education Act of 1965, the NDEA’s provisions for equality of educational
opportunity merged with the goals of President Johnson’s Great Society program and the larger
Civil Rights movement that was underway. The concept that education has a role to play in the
nation’s defense has remained a potent policy formulation within this larger rubric, and was
revisited in the National Security Education Program of 1991, and in the public discourse that
has dominated the post-9/11 era.

The education reform program initiated by Premier Khrushchev, however, proved far
more short-lived. Perhaps falling victim to Jackson’s Soviet dilemma, the Party leadership seems
to have overestimated the willingness of an educated populace to shift its children into a system
of compulsory manual labor. Notwithstanding the ebullience of the Izvestiia discussion, the
public enthusiasm necessary for the success of such a wholesale reform program seems never to
have materialized. It appears that the Soviet public and much of its leadership, already primed
for a cultural thaw, were not prepared to march back into the early practice of Marxism-Leninism
on this issue. Khrushchev’s education reform, set to begin in 1959, was only partially
implemented – and was thrown over, with the leader himself, five years later. Despite sharing
several key components in common with the American reform, Khrushchev’s program was, like
so many other Soviet policies, too much, too fast, too centralized – and destined for failure.

In Conclusion

Given the very few areas in which the American and the Soviet education reform
programs interacted directly, the fact that they shared as much as they did owes much to the
spirit of the age in which they were conceived. In 1958, education ascended into a position of
prominence in the political imagination that it has never left. Scholars of American education
history, particularly those who have focused on the Cold War period, have called attention to the
significance of the launch of the Sputnik satellites in bringing education to the forefront –
however briefly – of the minds of policymakers and the average citizen. Little noticed, however,
is a critical contribution of this study: that Sputnik triggered a similar crisis of confidence within
the society that put it into the sky. A key finding of this study is that the launch of Sputnik, with
all the technological prowess that it represented, triggered crises and introspection in the United
States and in the Soviet Union that ultimately contributed to the passage of large-scale education
reform programs in both nations. For Americans, as I have shown in this study, the crisis took
the form of doubt in the capabilities of the American education system, and a sense that in order
to keep up in the Space Race, it would need a level of (ultimately federal) support that it had heretofore not been able to marshal. For the Soviet Union, although public opinion is a far trickier thing to measure than in the United States, I have presented evidence to suggest that Khrushchev’s 1958 reform program was triggered in part by a need to build on Soviet Union’s technological successes, and to make changes to the system of compulsory schooling that would ensure continued dominance in the Cold War.

Although I do not suggest that the two education reforms were motivated by one another, I do argue that they were impacted by the gaze through the Iron Curtain that transfixed Moscow and Washington as they jockeyed for predominance in the Cold War landscape. In this study, I have presented evidence that a key figure in the passage of the National Defense Education Act – the bill’s co-sponsor in the senate, Henry M. Jackson (D-WA), reported his observations on the Soviet education system following his 1956 trip across the Soviet Union. Commissioner of Education Lawrence Derthick also lent his voice, after his firsthand experience with Soviet schools in the 1950s, to concerns expressed by American educators since the 1930s that the Soviet Union had, in its education system, built a remarkable tool that America would do well to match. In this study, I argue that the education was one of the many areas on which the United States and the Soviet Union kept an eye firmly fixed on one another during the Cold War, and I use primary sources from both nations to point out that, for the average Soviet citizen, this view was much more limited than it was for his or her counterpart in the United States. I have shown that the American press, in the wake of Sputnik, exhibits a degree of awareness of the Soviet education reform program that was not limited to circles of professional educators or policymakers who had firsthand experience of Soviet schools. In 1958, amidst what was characterized at the time as a second ‘educational awakening,’ Americans knew far more about
developments in the Soviet Union than Soviet citizens knew about how Americans viewed their own education system, for good or ill. It is a key finding of this study that whereas the discussion surrounding the American education system following the launch of Sputnik was informed by events in the Soviet Union, the Khrushchev’s reform program was far more internally motivated, and internally discussed, as I have shown in this study’s presentation of the Izvestia coverage of the program.

Finally, a central contribution of this study both to the study of the history of American higher education and to Soviet studies is the finding that the two reform programs shared several areas of commonality that are critical to understanding the motivations behind education for national defense in the Cold War period. Vocational education was a key area of confluence, and it is for that reason that I paired scholarship on the development of vocational education in the United States (Kliebard) with parallel developments in the Soviet Union, foreshadowing a prominent role for vocational education in the both the Soviet and the American education reforms of 1958 – a time when skilled manpower was a central consideration in policymaking. A deeper investigation into the role of vocational education in American national defense education policymaking, and perhaps as a driving factor behind education policymaking at the federal level in other developed nations, is a potential avenue of further inquiry stemming from this study.

I have shown in this study that the two reform programs coincided on other areas, large and small, from state funding for school construction to the overarching questions of the expansion of educational opportunity, and education for the continuation of national ideology. On the latter question, I have argued, American commentators felt comfortable in maintaining the upper hand. Senator Jackson’s articulation of the ‘Soviet dilemma’ that I recount in the study
is a succinct encapsulation of Americans’ views on the shortcomings of the Soviet educational system – shortcomings that were to be borne out in the ultimate failure of the Soviet Union itself. In 1959, the first year of the NDEA’s implementation, Jackson wondered whether the United States, as a free society, could marshal its resources more successfully than could its totalitarian competitor. Jackson’s answer, and the answer of history, was yes. Exploring and ultimately drawing conclusions on Americans’ introspection surrounding the American system of education in the wake of Sputnik, as I have attempted to do in this study, offers insights into how American federal education policymaking played out in the subsequent decades of the 20th century. Positioning this experience alongside that of the Soviet Union as Soviets looked toward the reform of their own education system sheds light on a little-known moment of confluence between these Cold War foes, and illustrates the predominance of education to national defense considerations, broadly writ, in times of global conflict and competition.
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