Preparing for War: Naval Education Between the World Wars

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[The views expressed herein are those of the author, and do not represent the position of the United States Naval War College or the United States Navy.]

Introduction

Fleet Admiral Chester W. Nimitz wrote in a letter dated 19 September 1965 to Vice Admiral Charles Melson, then President of the U.S. Naval War College in Newport, Rhode Island, that “The enemy of our games [at the War College] was always Japan and the courses were so thorough that after the start of WW II – nothing that happened in the Pacific was strange or unexpected…’. This paper examines the veracity of Admiral Nimitz’ statement by evaluating the adequacy of the flagship U.S. Navy educational institutions — the United States Naval Academy and the United States Naval War College — in preparing the Navy for combat in World War II. Specifically, how naval “lessons” from the First World War were treated and how the curricula were structured will be examined to consider their adequacy and impact in transforming a predominantly defensive navy into a well–honed organization with an offensive mindset capable of conducting operations in both inshore and open ocean areas.

Studying “The Right Stuff”

Admiral Nimitz continued in the letter mentioned above to indicate that “Each student was required to plan logistic effort for an advance across the Pacific – and we were well prepared for the fantastic logistic efforts required to support the operations of the war… ’ and that “One of my classmates [both in the Naval War College (NWC) Class of 1923 and United States Naval Academy (USNA) Class of 1905] Captain R.C. MacFall … devised the circular tactical formations used so successfully during WW II.” Fleet Admiral Nimitz went on to say that “I credit the Naval War College for such success I achieved in strategy and tactics both in peace & war.’ Admiral Nimitz’ ringing endorsement of his pre–war educational experience was most assuredly validated by his performance in the Pacific during the Second World War. Yet the realities of that war indicate that his assessment of the naval pre–war educational effort — as it applied to the Navy in general — could not have been farther from the truth. Although the focus on Japan as a primary threat and the elements of course composition, which stressed analysis of the situation and sound decision processes, were sufficient to produce a professionally–grounded Officer cadre with a superbly analytical and adaptable group mindset, the most forward–looking elements of technology and doctrine were
conspicuously absent from naval education of the interwar period. What was evident in the Navy’s Officer leadership during World War II, however, was an offensive orientation of ecumenical proportion borne of a distinct strategic culture ingrained in the leadership cadre of the Navy from their first days in Annapolis. That leadership cadre had studied "the wrong stuff," but in precisely the right way.

**Study, Gaming and Wartime Reality**

The U.S. Navy was, indeed, unprepared for the type of war it was to experience in the Second World War. It took the Allies some time to relearn the importance of convoying ships on the logistic train following the sea routes across the Atlantic. Expectations in the Navy were for a battleship war akin to that experienced in the First World War, as institutionalized in the major war game of the interwar period conducted at the Naval War College, the Battle of Sable Island (essentially a replay of the Battle of Jutland, another important element of study and critique, with east and west inverted, off Nova Scotia, and the United States arrayed against Britain). In that part of the War College curriculum, the utility of the aircraft carrier as other than a scouting platform was completely neglected. Other major elements of the curriculum centered on the Battle of Jutland as well. Jutland Decisions (88 pages), by Captain William Glassford, received substantial classroom attention after 1930. Jutland (41 pages), based on the eye–witness account of Vice Admiral Sir Matthew R. Best, R.N., a member of Admiral Jellicoe’s Fleet Flagship staff during the battle, entered the curriculum in 1936. Thus offensive carrier interactions were relegated to the study of gun platform battles bereft of radar or reconnaissance aircraft fixing of enemy units.

There were, of course, major advocates of air warfare in the Navy at the time, including Admirals William A. Moffett, John H. Towers, and William F. Halsey. Perhaps the most vocal early proponent of the aircraft carrier was Captain Washington Irving Chambers. That Chambers never made Admiral speaks volumes about the battleship predilection of the Navy’s top leaders. Even Halsey was less than totally enthusiastic regarding the offensive potential of the carrier. On his qualification as a pilot in 1935 at the age of fifty–two and taking command of the carrier Saratoga Halsey declared “…I regarded the privilege of commanding the Sara, merely as a pleasant bonus." Battleship Admirals, members of the so–called “Gun Club” or “Black Shoe Navy,” held firmly that cruisers and destroyers could not be spared from “the main formation” to protect carriers in an offensive role — carriers should have a scouting–observation function, remaining the “eyes of the Fleet.” This bias in the senior Navy hierarchy was reflected in the War College course of study. Thus the United States prepared for war in the Pacific institutionalizing in the Navy strategic culture a reliance on capital ship engagement akin to that theorized by another War College icon — Admiral Alfred Thayer Mahan — without realizing the importance of the carrier as a primary element of offensive warfare. Moreover, the U.S. Navy expected a day gunnery war. What actually took place, particularly in the War’s early stages, was in large respect a night torpedo war. How,
then, could the man best placed to evaluate the utility of naval preparation for World War II be so convinced that “…nothing that happened in the Pacific was strange or unexpected…” The answer lies not in what was studied, but how it was studied.

Preparing for War

Experience is an essential ingredient in the conduct of war. History is replete with examples that demonstrate the importance of experience in combat from the chronicles of Thucydides in the Peloponnesian War to the present. Yet few societies in history since 431 B.C. have been immersed in conflict to the extent of the Classical Greeks. In fact, many nations face the prospect of war without any significant recent opportunity for experience in how to conduct it. Such to large extent was the case with the United States Navy in the period leading up to the Second World War.

Prior to the Second World War the United States Navy, though extremely important to the nation’s emancipation from British rule and in defense of homeland security and national interests during the century that followed, was fundamentally defensive in character. During most of the nineteenth century, with the exception of the U.S. Civil War, the Navy was predominantly employed in coastal defense and commerce protection roles. Virtually all Officers who held major commands during the Second World War entered service after the offensive action of the Spanish–American War. Even during the First World War, which resulted in significant naval expansion, the Navy’s role fell short of being accurately characterized as offensive in nature. Moreover, practically none of the major naval players in World War II saw significant action during that war. How, then, could such a navy hope to engage against and prevail over foes with much more recent and extensive offensive experience, particularly against the Japanese, who could boast a warrior tradition — albeit almost exclusively on land — without significant blemish for the previous 700 years, and an offensive–minded Mahanian naval doctrine of their own?

In the case of the United States Navy during the interwar period the answer, of necessity, was education and training. Yet meaningful training could only emanate from an educated assessment of the likely circumstances of a future war. Thus education of the Navy — and particularly of its senior leadership and Officer corps — was the essential ingredient in any hope of preparing the Navy adequately for the type of conflict that was becoming increasingly likely in the period after the Japanese military established dominion over Manchuria in 1931.

The United States Naval Academy and Strategic Culture

Academic emphasis at the Naval Academy had changed very little from the time Fleet Admiral Nimitz entered as a Plebe in 1901 until the eve of the Second World War. In 1939, the “evolved” curriculum centered on Marine Engineering; Seamanship and
Several aspects of the Naval Academy curriculum stand out.

First, according to Captain W.W. Smith, who was charged to examine the adequacy of the Naval Academy curriculum in early 1939, “The curriculum [was] designed to accomplish our objective … basic Service requirements. … The course content and the method of instruction [were] so planned that midshipmen [would] retain as much as possible of the material offered in the four–year Naval Academy course and graduate with a clear perspective, equipped with a ‘set of useful tools.’ To accomplish this the course must have depth. Emphasis must be placed upon clear thinking, not on memorization.” Captain Smith was sure that best results could be achieved by “…covering less ground and by covering that ground more thoroughly, concentrating upon fundamentals rather than upon details.” Thus the Naval Academy emphasis was on thorough immersion in professional fundamentals.

Captain Smith postulated that “The Naval Academy [faculty was] fortunate in having a high turnover in officer personnel. The annual replacement of approximately forty percent of the officer instructors by officers direct from the Fleet enable[d] the professional departments to keep in close touch with Service requirements and make frequent changes in curriculum to conform with modern practice and new developments in naval science.” Also, of the pool of available civilian educators, a highly select and credentialed group of around seventy would usually apply for vacant Academy positions. Approximately eight of these would be competitively tested through written examination in Annapolis, with one or two emerging as certified for employment having also met with appropriate standards of personality and fitness before an Examining Committee. Thus highly–qualified civilian Professors or Instructors comprised from 50–65 percent of the teaching faculty, depending on department.

Yet the Naval Academy curriculum centered on professional fundamentals rather than strategic concepts and creation of an offensive mindset. What resulted was, aside from graduates with a “clear perspective, equipped with a set of useful tools,” a group of quality officers imbued with a deep sense of national destiny and convinced of the leading, offensively capable, role the Navy would play in realizing that destiny. Throughout their careers this cadre would interact, both operationally and in intellectual pursuits, to create and refine a sense of mission supporting their collective ethos and producing a strategic culture focused on offensive naval operations in distant waters.

**Sound Military Decision**

If the Naval Academy created a cadre of young men dedicated to naval service with a common vision of national greatness underpinning their view of the mission of the U.S. Navy, the Naval War College transformed them into an elite intellectual leadership
The key to this transformation was the honing of an analytical mindset capable of reacting to rapidly changing circumstances and formulating sound military decisions. Indeed, the ability to enhance students’ capacities for arrival at sound military decisions was the fundamental strength of the War College experience.

A good idea of the trends in educational philosophy at the Naval War College can be gained from the commencement and graduation speeches of some of the Presidents of that institution. As early as 1919, Rear Admiral William S. Sims, President of the Naval War College, stated in his Graduation Address that the primary mission of the War College was “the development of principles, and training in the application of these principles to practical situations. …It has been the object of the college not only to develop and define the principles of naval warfare, but to indicate the methods by which these principles may be applied with maximum success.” He related in his Commencement Address to the Class of 1920 that students “will gradually acquire confidence in [their] ability to estimate a situation correctly, reach a logical decision, and write orders that will insure the mission being carried out successfully.” Admiral Sims also indicated that “the [S]ervice would be greatly benefited if all of our officers could take the course. As this is manifestly impracticable, it follows that if the whole commissioned personnel of the Navy is ever to acquire a working knowledge of the principles and practice of naval warfare, it must be through the efforts and influence of the college graduates exerted upon the personnel under their command.” Thus Sims reemphasized the importance of a document that had been used at the War College since 1910 — Sound Military Decision, or the so–called “Green Hornet” emanating from the color of its cover. Starting in 1910 as Estimate of the Situation, this key guide to analysis of military operations evolved over time into Sound Military Decision. War College President, Rear Admiral Austin M. Knight, summed up the importance of this document, discussed below, quite well in 1913: “The [Estimate] is not for the purpose of justifying a decision previously arrived at, … [it] is a reasoned solution of a problem where each step in the process approaches a decision, [which] without those steps could be arrived at by accident only.

In his opening remarks to the Class of 1922, Rear Admiral C. P. Plunkett, Admiral Sims’ Chief of Staff, stressed the importance of early familiarization with three pamphlets critical to the War College curriculum: Training for Higher Command; Estimate of the Situation; and The Formulation of Orders. Admiral Plunkett continued, saying that “The Estimate of the Situation must be kept at hand, and constantly referred to, to inculcate an orderly process of reasoning.” He reiterated that “Policy, Strategy and Tactics” remained supremely important to the curriculum, but added “Logistics and Command” to that list. Plunkett also discussed “chart maneuvers” and “the tactical game” as methods of refining students’ analytical abilities, adding that “The playing of a bad solution may be more illuminating than the playing of a good one. One learns much by exposition of mistakes.”
In 1927 Rear Admiral W.V. Pratt extolled as a requirement for exercise of “supreme command” the “knowledge of … fundamental principles, based upon a background of sound practical experience.” He went further to express the criticality of the War College course of instruction in refining the “traditions and foundations” imparted at the Naval Academy and the “broad perspective” gained through experience in the Fleet.

Rear Admiral Harris Laning, the President of the Naval War College in 1930, reflected the increasing concern of the times in emphasizing that the College was “in a better position than any other part of the Navy to reach sound decisions … as to how to organize, employ, and operate … ships in war.” This President again stressed that “It is through … war games, conducted in miniature where he can see the whole picture, that the student learns how to apply to actual war situations the principles he has learned through his study. … [T]his institution is also a research laboratory of a very high type. Here we can try out, test, and weigh almost any idea that has to do with naval war operations.”

Again in 1933 the War College Acting Chief of Staff, Captain S. C. Rowan, stressed the importance of war gaming and the “Green Hornet.”

In casting about for a practical means of avoiding the errors of the Civil War, attention was drawn to the methods of the Prussian Army so successful in the War of 1866 and 1870, methods having their roots in the teachings of Scharnhorst and the writings of von Clausewitz after the Prussian defeats in the Napoleonic Wars, but deriving more directly from the older von Moltke’s school for staff officers. The success of those methods made an impression on a small group of American officers and specifically the German forms of orders appealed to them as filling a long felt need in the American Navy. Suffice to say from these origins evolved, among the many pamphlets of the War College, the Estimate of the Situation and the Order Form, which are merely means of arriving at a logical plan for a naval operation and embodying the plan in a clearly written order.

When coupled with offensive Mahanian theory centered on decisive battle between opposing battle fleets and the prevailing military search for restoration of maneuver and offensive action on the field of battle emanating from the First World War, this fascination with the cult of the offensive associated with the Wars of German Unification underpins the offensive mindset which permeated the Naval War College course of study.

Even on the eve of the Second World War, Admiral Edward C. Kalbfus, after reluctantly accepting a shortening of the course to five month, noted to the Graduating Class of 1941 that “the number of officers who pass through the College during the coming year will be
more than four times the number of those who received their diplomas today. He further noted that the graduates were “[s]chooled in the fundamentals of the warfare of today [and] they are prepared to apply them in terms of modern techniques. They go to join those other graduates of this College who, in this hour of need, are to be found in all the highest command positions, afloat and ashore, which it is the providence of the Navy to fill.”

Thus resoundingly throughout the period between the World Wars the importance of gaming, flexibility, and sound military decision properly conveyed to subordinates were emphasized and reemphasized as the essential ingredients for the Navy’s Officers in command and senior leadership positions to excel in war. Sound Military Decision stressed factors as “Universal Determinants in War” including:

(a) The nature of the appropriate Effect Desired,
(b) The Means Available and Opposed,
(c) The Characteristics of the Theater of Operations, and
(d) The Consequences as to Costs.

Also stressed were the physical objectives involved, the relative positions utilized, the apportionment of fighting strength, and the provision for freedom of action with regard for Suitability with respect to the desired effect, Feasibility by reason of means available and opposed and Acceptability as a factor of consequences and costs.

Thus a pattern of logical analytical thought was stressed which was developed by contemplation of courses of naval action within the context of likely future war and scrutinized, debated and refined through wargaming. The War College in the interwar period was all about decision making in battle. Aside from an aggressive group mentality of Officer alumni of the Naval War College, what resulted was an understanding among those who would shortly become the top leaders of the Navy regarding appropriateness of certain actions under given circumstances in a future engagement. Sound Military Decision became a process of mental acuity imbued in graduates irrespective of the shortcomings of the Naval War College curriculum mentioned above.

Strategic Culture in the Wartime Navy

From the outset of their careers, a highly–select group entered the Naval Academy at approximately the same time, developed a cultural bias centered on the expectation of national greatness borne of extra–hemispheric involvement and a group sense of the Navy’s role in securing national policy, and reinforced in their proclivity for offensive naval action by long–term mutual interaction and Professional Education. What emerged from the Naval War College was the same group of men with a warrior mentality and a firm expectation of the professional competence and analytical mindset of their wartime counterparts which would lead to decisive action through a sound decision process.
Moreover, this expectation was only reinforced by their War College experience, irrespective of its intellectual focus.

Proof of this “cradle to grave” strategic culture can be found in the roles of prominent Naval Academy and Naval War College graduates in World War II. Little needs to be said of the role Fleet Admiral Nimitz played in that conflict. His classmate, R.C. MacFall (USNA’05/USNWC’23) mentioned earlier, was credited by Admiral Nimitz with devising the circular tactics that proved so successful during the War. Admiral Harold R. Stark (USNA’03/USNWC’23) — later Chief of Naval Operations from 1939 to 1942 — was also a member of that class. Admiral Charles M. “Savvy” Cooke (USNA’10/USNWC’34) went on to become, in the eyes of many of his contemporaries, the most brilliant Navy Planner of the Second World War. Fleet Admiral Ernest J. King (USNA’01/USNWC’33) was hugely instrumental in all aspects of strategic prioritization and planning during the War, and was the primary advocate of modifying the “Europe First” strategy at the War’s outset in favor of simultaneous offensives against both Germany and Japan. Admiral Frank Jack Fletcher (USNA’06/USNWC’30) commanded the Carrier Task Forces which forestalled and decimated the Japanese kido buta, or Fast Carrier Group, in the battles of the Coral Sea, Midway and the Eastern Solomons — three of the five carrier battles of the Pacific War. Admiral Thomas C. Kinkaid (USNA’08/USNWC’30) and Admiral Spruance commanded during the other two, the Battles of Santa Cruz and the Philippine Sea. Admiral Richmond K. Turner (USNA’08/USNWC’36) was equally important in orchestrating the vital amphibious operations across the Pacific.

Other prominent commanders during World War II include: Admiral John S. McCain (USNA’06/USNWC’34); Admiral John H. Towers (USNA’06/USNWC’34); and a host of others. In all, the U.S. Naval Academy produced 215 Admirals in the decade between 1901 and 1910. Another 37 Admirals came out of the Naval Academy Class of 1911, as well as 36 Admirals and one Marine Corps General from the class of 1912. Yet the largest class in this entire period was 208 in 1907, with classes averaging just over 100. Even an Academy drop–out, Henry Latrobe Roosevelt (class of 1901), son of President Theodore Roosevelt, later became Assistant Secretary of the Navy.

**Conclusion**

To what extent, and why, was this cadre of offensively minded Officers adequate as a core of naval leadership? In 1945, Reserve Naval Officers numbered 270,893 out of
317,316 Officers in the United States Navy — or 85.4 percent of the Officer Corps. None of these were Naval Academy graduates, and the first Reserve Officers who saw service in the War entered the Naval War College with the Class of 1942. It is thus no coincidence that the overwhelming majority of senior Officers in critical wartime billets during World War II were graduates of both Annapolis and Newport. While the specifics of their education — particularly at the Naval War College — may not have precisely mirrored the type of war they were about to fight, their ability to hone and reinforce their warrior mentality and create an offensive strategic and operational spirit in a hither–to coastal defense Navy clearly emanated from their shared operational and intellectual experiences. Life–long association and career interaction, a shared ethos centered on national greatness and the Navy’s role in achieving it, and the analytical and offensive–minded decision process imbued in Sound Military Decision prepared the senior Officers of the United States Navy well for combat in World War II in spite of studying “the wrong stuff.”

[1] Nimitz, Chester W., Fleet Admiral, United States Navy. Letter to Vice Admiral Charles Melson, President of the United States Naval War College, dated 19 September 1965 on display in McCarty – Little Hall at the U.S. Naval War College, Newport, Rhode Island.

[2] This paper is part of a larger study which considers the naval lessons of the First World War, their study and incorporation into the curricula at the United States Naval Academy and the United States Naval War College, and the adequacy of those curricula in preparing the naval leadership for war at sea in the Second World War. In that study, the adequacy of the institutionalized naval educational experience will be evaluated through consideration of the five carrier battles of World War II.


Hanson, Victor Davis The Western Way of War: Infantry Battle in Classical Greece, Alfred A. Knopf: New York, 1989, 31. Here the author points out that in the fifth and fourth centuries, battle occurred in the Greek world nearly two out of every three years.

This insight was provided by Professor Emeritus Frank Snyder, Capt. USN (Ret.) based on research he has conducted on World War I activities of subsequent Naval War College graduates.

United States Naval Academy Memorandum from Captain W.W. Smith, U.S. Navy, Mathematics Department, to The Superintendent, Subject: Survey of the Curriculum of the United States Naval Academy, dated 1 April 1939, 1. Document provided by Mr. Gary LeValley, Archivist, U.S. Naval Academy library.


It is interesting to note that, during the entire period between the World Wars, the Naval War College Faculty was composed entirely of serving military Officers.

Kennedy, John Gerald. “United States Naval War College, 1919–1941: An Institutional Response to Naval Preparedness.” USNWCA, 1975. Unpublished manuscript. This manuscript provides an excellent narrative of the development of and changes in the curriculum at the Naval War College during the inter-war period, as well as of the imprint made by each President of the War College during that period.


Laning, Harris, RADM, USN. Opening Address to the Classes of 1931, delivered 2 July 1930, 2.

Rowan, S.C., Captain, USN. Opening Address to the Classes of 1934, delivered 1 July 1933, 4.

Kalbfus, Edward Clifford, ADM, USN. Graduation Address to the Class of 1941. USNWCA:RG–14/15, 1.


Register of the Alumni, Graduates and Former Naval Cadets and Midshipmen, United States Naval Academy Alumni Association, Inc., 1845–1985. The Association, publishers, 1985 edition. Also, The Register, manuscript listing of U.S. Naval War College Faculty and graduates, Provided by Dr. Evelyn Cherpak, Archivist, U.S. Naval
War College. Please note that all listings of graduation dates from the Naval Academy and Naval War College are drawn from these two publications.

Annual Report of the Secretary of the Navy – Fiscal Year 1946, 23 and 27.

Nimitz, C.W, FADM, USN. Address of the Chief of the Bureau of Navigation to the graduating class, December 2, 1941, USNWCA:RG–14/15, 3.