



# United States Naval Academy Case Study Using the Adoption of Innovation Literature to Guide Institutional Strategies for Assessment

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## OVERVIEW

One of the biggest challenges is for a campus community to go from viewing assessment as an innovation engaged in by a relatively small number of early adopters to its institutionalization as part of the campus culture. This case study describes the path that the United States Naval Academy is taking to make such a transition. The literature on the adoption of innovation provides the guiding principles for this effort (see Gray 1997). As Hall, Loucks, Rutherford, and Newlove (1975, p. 53) have pointed out, "Innovation adoption is a process not a decision-point-a process that each innovation user experiences individually." The purpose of using the guiding principles of innovation adoption is to ensure that assessment at the Naval Academy is meaningful, manageable, and sustainable (The Program Assessment Consultation Team 1999) and, ultimately, to achieve horizontal and vertical integration of assessment efforts as described in the Middle States Commission on Higher Education Characteristics of Excellence (2006).

## Keywords

Institutional strategies for assessment, Innovation, Institutional transformation, Leadership and assessment

## LEVELS OF USE OF AN INNOVATION:

- nonuse
- orientation
- mechanical use
- routine use and refinement
- integration
- renewal

(Hall, Loucks, Rutherford, and Newlove, 1975)

## DESCRIPTION OF THE CASE

In Spring 1999, the United States Naval Academy (USNA) completed a Strategic Plan that incorporates a list of 11 capabilities and attributes to be attained by graduates in support of the USNA mission *to develop midshipmen morally, mentally, and physically and to imbue them with the highest ideals of duty, honor and loyalty in order to provide graduates who are dedicated to a career of naval service and have potential for future development in*



*mind and character to assume the highest responsibilities of command, citizenship and government.*

Academic assessment at USNA, was also launched in 1999 within the context of the USNA Strategic Plan. As in other institutions of higher education there has always been various types of assessment conducted at the Naval Academy. For example, the Department of Defense Directive requires an annual assessment of the Naval Academy for the Secretary of Defense each November. In addition to the chain-of-command oversight, the President of the United States also provides oversight, as Commander-in-Chief of the Armed Forces, through a legislatively mandated Board of Visitors (BOV). The Board consists of nine members of the United States House of Representatives and Senate, augmented by six Presidential appointees who have distinguished themselves in other walks of life. The Board is specifically charged with inquiring into the state of morale and discipline, the academic curriculum and instruction, physical equipment and facilities, fiscal affairs, and any other matters relating to the Academy that the Board deems appropriate. The Board meets four times a year and provides an annual, written report to the President of the United States regarding its views and recommendations concerning the Academy.

Of course, other traditional assessment activities were also in place such as the use of exams, quizzes and other methods to evaluate student performance in classes as well as periodic program reviews and accreditation self-studies.

However, what we think of today as an integrated program of institutional effectiveness and student learning outcomes assessment did not exist prior to 1999 (i.e., a condition of *nonuse*). Therefore, in order to begin the *orientation stage* of the adoption of assessment, during summer and fall of 1999, a small number of faculty volunteers attended different assessment conferences and workshops. These included the American Association for Higher Education Assessment Conference, a week-long workshop at Alverno College, the College Board: Learning Outcomes & Assessment Workshop, and the National Assessment Institute sponsored by Indiana University Purdue University Indianapolis. In addition, the Academic Dean and Provost sponsored a one-day workshop with Gloria Rogers from the Rose-Hulman Institute of Technology in order to provide the academic administration with an understanding of assessment in higher education (i.e., *orientation*).

Drawing on the faculty expertise developed through these experiences, in August 1999, the dean asked for volunteers to work on assessment and, as a result, created the Assessment Task Force (ATF). The ATF was charged formally by the dean to look at the academic capabilities and attributes of graduates embedded in the Strategic Plan and to develop a campus assessment process. The Task Force members were *opinion leaders* in their academic divisions and the group was led by the Director of Teaching and Learning, herself a well respected, long-term faculty member. These were the innovators and early adopters among the faculty who could provide leadership for change by example.

The next task was to start to *orient* other USNA faculty about assessment. During the 1999 - 2000 academic year, the ATF developed a framework for assessment on based on the Rose-Hulman Institute of Technology model. In addition, a series of workshops were held in May and June 2000 to provide some initial support and information (i.e., *orientation*) to departments as they started creating their assessment plans. This assistance in adopting a template provided guidance for the *mechanical use* of assessment.

Annual assessment colloquia have been held each year since 2001 to share accomplishments and lessons learned, which *orients* others to assessment. The fall 2001 colloquium involved a poster session of each department's assessment goals. Starting in academic 2001-2002, academic departments within the Mathematics and Science, Humanities and Social Sciences, and Engineering and Weapons Systems divisions were tasked by the dean to



establish assessment programs. The fall 2002 colloquium involved a poster session and presentations by three departments that highlighted different approaches to assessment and the use of a range in assessment instruments. In addition to this general support of the institution's assessment efforts, the Office of Academic Assessment was created and a director was brought aboard in fall 2002. The Director of Academic Assessment and the Director of Teaching and Learning, co-chair of the Assessment Task Force, met with each academic department chair and faculty members responsible for assessment during the 2002 - 2003 academic year to learn about their plans and to discuss future development of assessment at the Naval Academy. These meetings helped departments to move from the *mechanical use stage* to the *routine use stage*. In addition, in spring 2005 the AFT became a standing committee of the Faculty Senate. This was a major step in making assessment a routine part of the Naval Academy's operation.

Over the next several years, departments created and implemented assessment plans for each major, minor and interdisciplinary program. And departments submitted annual reports to the dean and the Faculty Senate Assessment Committee summarizing their progress. These reports, which have been shared with the Faculty Senate show that departments have tried a great variety of approaches to assessment and found that some worked and some did not. For example, some departments discovered that they had too many goals and, as a result, combined some and eliminated others to make their assessment more focused. Other departments found, not surprisingly, that their assessment process was too cumbersome or ambitious for the amount of effort required and that data did not yield sufficiently useful information. These lessons learned resulted in the revision of data collection processes and, in a number of cases, to course or curricular changes. This has led to the *routine use and refinement stage* of assessment within the academic departments as they go through the cycle of setting goals, identifying learning opportunities, evaluating student achievement, determining strengths and weakness, making corrections and then repeating the cycle. In fact, after repeated cycles many departments have moved from the *routine use and refinement stage* to the *integration stage* in that assessment has become an acknowledged part of the department culture.

While there is still much work to be done within academic departments related to the establishment of assessment as a part of the departmental culture, the next challenge is to spread assessment throughout the Naval Academy and to integrate assessment efforts both horizontally across units and vertically from the classroom to the Academy as a whole. This need was identified in our institutional self-study that provided the basis for our recent Middle States Commission on Higher Education (MSCHE) accreditation review. The visiting team report included the recommendation that we establish a comprehensive, integrated, and institution-wide written institutional assessment plan as a both a framework and goal for the current Strategic Plan to meet the criteria of MSCHE Standard 7 and 14. This recommendation reinforced our own self-study observation and related recommendation that there does not seem to be an overall institutional assessment plan and a steering or advisory group (similar to the Faculty Senate Assessment Committee) with oversight responsibility for guiding and evaluating the overall institutional assessment process. Also that the Academy should institutionalize periodic assessment processes so that these do not remain dependent upon the routinely changing senior leadership of the institution.

In response to those recommendations, the Superintendent, in November 2006, chartered an Academy Effectiveness Board to coordinate the development, maintenance, and execution of the Naval Academy's Effectiveness Plan and its associated assessment processes. The Board will report directly to the Superintendent and produce an annual Academy-wide assessment report for use by the Superintendent and the Academy's senior leadership as well as monitor the assessment feedback process and procedures. The Academy Effectiveness Board (AEB) has the following responsibilities:



- Set institution-wide expectations in the form of an Academy effectiveness model and implementation timeline.
- Design mechanisms for evaluating the institutional level accomplishment of graduate attributes and capabilities.
- Establish responsibility for assessing the accomplishment of attributes and capabilities, as well as specific student learning outcomes relevant to each aspect of the Academy's officer preparation program in order to create a horizontally- and vertically-integrated assessment process.
- Integrate the Academy's effectiveness assessment results into a revised strategic plan in order to create a formal structure for tracking actions taken in response to assessment results at all levels and within all divisions of the Academy.
- Define the format and process for reporting to the Superintendent and Naval Academy senior leadership team at least semi-annually the assessment results and associated actions taken for continuous improvement.

One of the first tasks carried out by the AEB was to form an *ad hoc* committee consisting of representatives of all areas of the Academy (Academic Dean and Provost, Commandant of Midshipmen, and Director of Athletics) to review the 1999 Strategic Plan attributes related to the USNA mission. The revised list will be disseminated to all units for use in building or refining their assessment plans and for use by the Senior Leadership Team in integrating the academy effectiveness assessment and strategic planning processes. In effect, the work of the AEB represents the last stage in the adoption cycle, *renewal*. Over the next five years we will implement a systematic process to make assessment a part of the Academy culture by helping units in all areas of the move from *nonuse* to *integration* within this new framework of Academy Effectiveness Assessment.

#### RATIONALE IN TERMS OF EDUCATIONAL IDEAS

To understand what factors either inhibit or facilitate the adoption of an innovation like assessment it is useful to look at the literature on innovation as epitomized by Rogers (1995), "it matters little, as far as human behaviour is concerned, whether or not an [innovation] is 'objectively' new ... If the idea seems new to the individual, it is an innovation" (p. 11). The assessment process is complex and individuals are unique. This information argues for the particularization or local adaptation of assessment as these variables are idiosyncratic to each institution, department or programs of study, and faculty member" (Gray, 1997). Therefore, these ideas provide a foundation for moving higher education institutions from innovation to the institutionalization of assessment within their unique cultures.

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