# Institutional Assessment Report: Academic Cost Center POC: K Cermak, Associate Provost for Planning & Assessment November 1, 2022

**PART ONE: Executive Summary of Findings** 

# 1. Supporting Midshipmen.

Nine sessions of a Plebe Seminar, totalling 127 students, were piloted in AY22. The goal of the program was to provide midshipmen with experiences in and a greater understanding of the disciplines that they expressed interest in during the admissions process with the intent of supporting Navy major distribution goals. Midshipmen and faculty response to the seminar was mixed. Having scheduled time for plebe advising was appreciated, but both faculty and midshipmen wished for more one-on-one meetings. For AY23 we have scaled up the pilot to encompass all plebes, but we're also allowing more flexibility on the part of the plebe advisers as to how they use the time and are encouraging plebe advisers to use much of the dedicated time for one-on-one meetings with their advisees.

• Assessment ongoing

## 2. Equity, Diversity, & Inclusivity.

The Academic Cost Center continues to work with Human Resources to attract and hire a diverse cadre of employees to educate and inspire the Brigade. Prior to hiring AD positions department chairs, search committee leaders, the Vice Provost, the Associate Provost for Finance and Military Affairs, and HR specialists meet for a search orientation in which strategies to attract a diverse pool of applicants is explicitly discussed; e.g., The Registry, advertisement language, Diversity Search Advocate participation. Assessing the diversity of applicant pools is not possible as the submission of demographic information form is voluntary and the form does not include the vacancy announcement number or position title. In the past year women recruited into tenure track positions was slightly lower than the representation in the interview pool demographics by 3%, while the racial diversity of tenure track hires exceeded the representation in the interview pool by 6%.

Assessment ongoing

#### 3. Core Curriculum.

The Provost's Office received results from a survey of graduating midshipmen, piloted by Institutional Research in AY21 and repeated in AY22. Survey results are an indirect measure of learning in the general education/core curriculum. The survey currently asks mids to share their perceptions of learning for each of the nine core curricular learning outcomes. The variation in results between areas that midshipmen felt substantially contributed to their knowledge and abilities and faculty evaluations suggest a handful of areas for further investigation.

• Assessment ongoing

#### 4. Faculty development.

The indirect cost recovery model has been adjusted to the following. A 10% overhead cost will be applied to all Department of Navy and National Science Foundation reimbursable research funding documents. A 15% overhead cost will be applied to all Government but non-Navy reimbursable research funding

documents, excluding NSF. A 20% overhead cost will be applied to all reimbursable research funding documents associated with University, Industry and Other efforts. These percentages apply to salary (including fringe benefits), supplies and travel portions of a budget.

- Adoption of revised cost recovery model complete.
- Evaluation of ability to support reimbursable work will begin in FY23

The Center for Teaching & Learning (CTL) has formalized requirements to obtain the rank of Master Instructor set out in Provost Instruction 1520.2D Academic Titles for Military Faculty. Additional requirements needed to obtain this title have been identified and are regularly offered. This instruction goes into effect for rotational officers who begin teaching at USNA after the spring semester of AY22.

- Formalization of requirements complete.
- Evaluation of the program will begin with the first cohort in AY23.

# PART TWO: Progress report on Cost Center/functional unit/program outcomes from the past academic year

Goal one: Supporting midshipmen through the plebe seminar.

The long-standing model for plebe advising at USNA has been to assign three faculty members, one from each School when possible, to each company of plebes. The plebe advisers would meet with their companies as a group twice during the summer, divide up the plebes among the team, and then remain as academic advisers to their assigned plebes up until major selection in March of the 4/C year. Students whose circumstances are outside of that of a typical 4/C are pulled out of their companies for specialized advising. This model, while well-matched to the rhythms of plebe summer, had some points of concern. One issue is that the specialized advising cases clearly stand out -- since these midshipmen aren't assigned one of the three standard company advisers -- and this can be stigmatizing for those midshipmen. Also, the alignment of the adviser to Company and the lack of dedicated time during the academic year for plebe advising both contribute to diminishing the influence of faculty advisers relative to peers in the academic decisions of the 4/C. It is suspected that peer influence is responsible for an observed trend in increasing aggregation of students into a small subset of majors. In 2020, over 25% of all midshipmen were in just two of USNA's 26 majors. Learning to be part of a team is a critical part of plebe year, but when making decisions about major selection we want our students to prioritize their individual interests and abilities. The faculty, therefore, wanted to explore alternative models for plebe advising that would place plebes into advising groups according to their interests and not aligned to companies, and also provide dedicated time during the year for plebe advising. In many higher educational institutions this is accomplished through a Freshman Seminar.

Nine sessions of a Plebe Seminar, totalling 127 students, were piloted in AY22. The goal of the program was to provide midshipmen with experiences in and a greater understanding of the disciplines that they expressed interest in during the admissions process with the intent of supporting Navy major distribution goals. Reporting on assessment in this area is consistent with Strategic Plan Goal 3, Objective 4, to, "Support continuous improvement processes and adopt best practices in higher education...to meet the evolving needs of the Navy." Additionally, assessment of this program supports the Master Academic Plan goal to, "Continue to develop and promote the Plebe Advising & Mentoring Program, Assist plebes to choose a major..."

Midshipmen were pulled from three companies selected at random and then assigned to seminars according to the School for the major that they indicated was their first choice on the advising survey administered through the Academic Background System in advance of plebe summer. This did not quite meet the goal of spreading the students in each group out over many companies, but the limit to three companies was necessary for the pilot to co-exist with the traditional model. The seminars met for one hour per week and were staffed by experienced faculty volunteers. The pilot instructors experimented with different course structures. Most used about half of their time for traditional advising matters and about half the time introducing the students to the majors offered within the School.

The response of the students to the seminar was mixed. Of the 88 students who responded to the survey, 75% of the students expressed that they felt their time in Plebe Seminar was "well spent" some or most of the time (as illustrated in Fig. 1a). In comments, some of the participants expressed that the majors' information discussed there was redundant with the other majors' brief activities, and many participants expressed a desire for more one-on-one meetings with their advisers in lieu of group meetings.

The seminar instructors were also surveyed to assess their impressions of the course. All of the instructors expressed that they felt the time spent in their Plebe Seminar was "well spent" some or most of the time (as illustrated in Fig. 1b). In a survey and in a follow-up focus group, the instructors all expressed

appreciation for having scheduled time to meet with their students, and they also echoed the student recommendation that more of that time might be spent on one-on-one meetings rather than meeting with the whole group. Many found that they had several plebes in their sections who were no longer interested in the major in which they had initially expressed interest before the start of plebe summer, which was used as the basis of seminar placement, and that the advisers felt ill-equipped to mentor these students in major selection. Finally, the instructors also indicated concern with the "scale-up" of the pilot model to encompass all plebes.



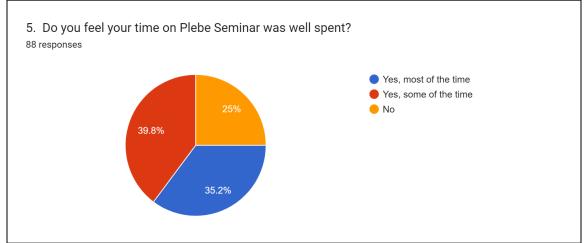
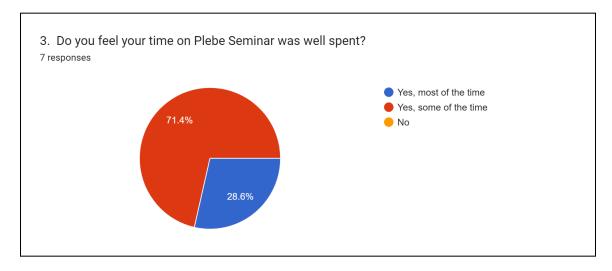


Fig. 1b. Plebe Seminar Instructor Survey Result



The results for major selection were inconclusive. For the students who participated in the seminar, 64.57% ultimately chose a major in the same School as the major that they listed as their first choice before Plebe Summer, while this fraction for the general plebe population was 65.84%. However, a better measure of whether the seminar plebes had better mentoring in their major selection would be the long-term retention rates of the seminar plebes in their chosen major.

Following up on the recommendations of the seminar instructor focus groups, an alternate approach is being pursued in AY23 which seeks to preserve the intent of the pilot but without requiring more resources (particularly midshipman or faculty time) than the traditional plebe advising model. For AY23,

plebe advisers were assigned as follows: as in years past we sought 30 faculty volunteers from each of the three schools. However, instead of then assigning 3 plebe advisers to each of the 30 companies, we assigned 3 plebe advisers to each of the 30 weekly class periods. This results in each class period having a "triad" of plebe advisers that represent the three Schools. When the course schedules for the plebes were nearly complete, we then assigned every plebe an advising section corresponding to the plebe's free periods. This will allow both dedicated time for plebe advising and plebe advising groups based on major of interest and not aligned to the company structure.

The traditional plebe summer advising activities still took place, but without specific plebe adviser assignments. These meetings use a common brief, often delivered in the past by only one of the three plebe advisers for the company to the entire company. We still utilized the cadre of plebe advisers to deliver these briefs, but no longer with the scheduling requirement of aligning particular plebe advisers to companies.

The advising section is not a graded class, and plebe advisers will have the freedom to use that time as they see fit. For most this will be a mix of meeting as a group to cover common advising topics and individual meetings, and the advisers can still use some of the time to discuss the majors within the associated School if they choose. Furthermore, if a student's academic interests have changed since they completed the ABS survey, they can be easily shifted to the section of the triad that better matches the student's current academic interests. The seminar will only be used in the fall. In the spring the plebes will continue with their adviser assignments up until major selection, but will need to utilize ad hoc scheduling for meetings (as has always been the case in the traditional advising model.) We plan to continue to assess this model to see if it provides better mentorship for the plebes.

### Goal two: Equity, diversity, and inclusion actions.

This goal is to assess and strengthen Equity, Diversity, and Inclusion in terms of fostering a climate that is supportive of the recruitment of faculty and staff from underrepresented groups; creating an inclusive culture; and monitoring student demographics. This assessment goal supports Strategic Plan 2030:

Goal 1, Objective 1 with regard to valuing the lived experiences and diversity of the Brigade of Midshipmen and Objective 4: Strengthen the environment within the Brigade to be more inclusive, where all are treated with dignity and respect and in which our diversity makes us stronger leaders, better shipmates, and more productive citizens.

and

Goal 2 to cultivate a vibrant and inclusive community of role models, continuous learners, and leaders who develop the Brigade and contribute back to their professional communities and more specifically with Objective 1, to attract a highly qualified, diverse cadre of faculty, staff, and coaches who model the highest professional standards and Objective 2, to develop and retain faculty, staff, and coaches who educate and inspire the Brigade.

And also, the Master Academic Plan goal of "Advancing and enhancing equity, diversity, and inclusion."

#### **Academic Hiring**

Department chairs and search committee leaders meet with the Vice Provost, Associate Provost for Finance and Military Affairs, and HR specialists to discuss the hiring process for AD appointments. The search orientation meeting explicitly includes discussions of strategies to attract a diverse pool of applicants (note that it is not possible to assess the diversity of applicant pools for specific positions,

submission of the demographic information form is voluntary, and the form does not automatically populate with the vacancy announcement number or position title.). Activities to strengthen Equity, Diversity, and Inclusion include:

- USNA's membership with the National Registry of Diverse & Strategic Faculty, "The Registry," which connects institutions of higher education with a diverse and qualified pool of candidates. <a href="https://www.theregistry.ttu.edu/Default.aspx">https://www.theregistry.ttu.edu/Default.aspx</a>
- Faculty recruitment advertisements all include the following institutional language:

The United States Naval Academy is committed to building a diverse workforce who collaborate to provide a multi-disciplinary and hands-on approach to student learning and leadership development. We believe that individuals from diverse backgrounds strengthen our programs and positively impact student success. We encourage qualified applicants from all backgrounds to apply for consideration.

- Further, departments are encouraged to include language requesting information from candidates about their experiences working with diverse students, and further to articulate the department's view on the value of having a diverse faculty for the department. Diversity search advocates (DSAs), see below, receive training to assist departments in this activity.
- The diversity search advocate program is a part of tenure-track faculty searches. The DSAs are faculty and staff members who serve on search committees to promote EDI. The DSA is a non-disciplinary expert whose role is to provide guidance to reduce bias, communicate best practices, and ensure that the committee is aware of issues that can impede or enhance EDI efforts at each stage of a search; e.g., language of the advertisement, broadly considering ways and locations to reach possible candidates, alerting to implicit biases, and recognizing and addressing cognitive shortcuts in the evaluation process.
- Training of DSAs for the AY23 recruitment year consisted of two ninety minute sessions. The
  sessions covered best practices promoting diversity and inclusivity at each stage of the search
  process from advertisement development, advertising venues, candidate assessment rubrics,
  implicit bias, cognitive shortcuts, and effective interviews. DSAs from the AY21 and AY22
  searches were surveyed to identify program improvements, including additional training and
  support material needs.

During the past year candidates interviewed for faculty positions were 31% female and 69% male based on gender presentation. Similarly 31% of the candidates interviewed were visually identified as representing an underrepresented racial group. Tenure track faculty hired from this applicant pool were 27.3% female, and 36.4% representing an underrepresented racial group. The number of females recruited into tenure track positions was slightly lower than the representation in the interview pool demographics by 3%, while the racial diversity of tenure track hires exceeded the representation in the interview pool by 6%.

As reported in past years, equity, diversity, and inclusion activities take place within departments, schools, and offices sometimes as independent initiatives and other times as modifications to how business is conducted. Additional areas of focus are reported on below:

The Office of Diversity, Equity and Inclusion and Provost Office worked together in AY22 to develop an exchange program between USNA and NROTC Programs at Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSI). Unfortunately, funding/logistics were not settled in time to begin exchanges in the Spring AY23 semester. It is anticipated that these issues may be resolved so that the program can be implemented next

academic year. Meanwhile the academic cost center is interested in pursuing an HBCU/USNA faculty exchange program in the local area.

The Center for Academic Excellence (CAE) launched the MGSP Equity Initiative" in AY21 to determine "how the Midshipmen Group Study Program (MGSP), including the MGSP Peer Writing Tutor Program, could become a more equitable, welcoming space that reflects the Brigade's diverse strengths." The first year of the initiative focused on examining historical demographics of the Brigade and MGSP leaders, which identified that the racial profile of the MGSP leaders was not representative of the Brigade. The initiative set benchmarks to measure change against, broadened the selection criteria for program participation, expanded tutor recruitment efforts, updated training programs aimed to create more inclusive environments, and addressed the value of diversity with the faculty coordinators who help select midshipmen for the program. In AY22, the initiative focused on ensuring the MGSP teams are diverse and that MGSP leaders received training in creating an equitable environment, identifying implicit biases, and enhancing the attendee experience. This has resulted in increasing the diversity of MGSP leaders, and in enhancing the leaders' understanding of equity and in promoting empathy, respect, and effective teaching practices. This is an ongoing initiative.

Nimitz Library has developed several initiatives related to inclusion:

In a process that conscientiously included diverse voices and perspectives from USNA faculty, staff, and midshipmen, Nimitz Library completed the first iteration of the <u>Nimitz List</u>, a curated list of documents (e.g., books, films, podcasts) aligned with USNA's Attributes of Graduates of Inclusion and Resilience.

The library has further cultivated its collection to include materials for informing inclusive hiring practices (as well as 4 library staff members having completed DSA training).

Through relationships with the Japanese Midshipmen Club and the Joy Bright Hancock Organization, Nimitz has collaborated on book displays.

Also, focus group participants for the Nimitz Library Space Study included the Jewish Midshipmen Club, Native American Heritage Club, and Korean American Midshipmen Association.

#### Majors demographic information

With assistance from Institutional Research, demographic breakdowns for each school and major have been generated annually and shared with members of the Academic Assembly. The intent of providing this data is to inform leaders about current patterns, encourage reflection and (as appropriate) action, and serve as a baseline to measure change. Departments have responded in a number of ways including: supporting the DSA program (by using the program for their searches and enabling faculty and staff the time to train and serve as DSAs); using non-traditional outreach and recruiting strategies to increase the diversity of candidate pools and hires; and by utilizing the MGSP program to ensure the major is visibly represented by midshipmen role models from diverse backgrounds.

The following tables contain information for midshipmen indicating the school of their preferred major, indicated during January of their plebe year, and the final major at time of graduation.

Table 2.1 Major's School Preference and Graduation by Gender

Class Years 2020-2022		School Preference Graduates (Plebes)		Final Major of Graduates		Preference Percentages		Final Major Percentages		Delta for Graduates Preference vs Degree at Graduation (by Schl)	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
E&W	2020	301 (327)	71 (77)	275	54	81%	19%	84%	16%	-26	-17
	2021	270 (287)	72 (77)	235	63	79%	21%	79%	21%	-35	-9
	2022	239 (251)	64 (69)	211	56	79%	21%	79%	21%	-28	-8
HUMSS	2020	220 (259)	114 (125)	248	123	66%	34%	67%	33%	28	9
	2021	242 (268)	108 (113)	294	109	69%	31%	73%	27%	52	1
	2022	254 (282)	98 (106)	285	113	72%	28%	72%	28%	31	15
M&S	2020	214 (236)	94 (102)	211	101	69%	31%	68%	32%	-3	7
	2021	266 (293)	127 (133)	248	135	68%	32%	65%	35%	-18	8
	2022	283 (307)	146 (157)	279	140	66%	34%	67%	33%	-4	-6
No Major	2020			2	1			67%	33%		
	2021			1				100%	0%		
	2022			2	2			50%	50%		
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Total		2289 (2510)	894 (959)	2291	897	72%	28%	72%	28%		

To read the table begin on the left with the school, Engineering & Weapons, and class year, class of 2020. The figures in parentheses indicate that 327 male and 77 female 4/C from the class of 2020 indicated that their first choice major was in the School of Engineering & Weapons. Of those midshipmen 301 men and 71 women graduated from USNA. Proceeding to the light blue columns 275 men and 54 women from the class of 2020 graduated with engineering degrees. The graduation rates in this row are a result of attrition from majors within the school, attrition from USNA, and students that switched into the school's majors. The next two sets of columns show the percentage of preferences and graduates for each gender for the college and class year. Initially 81% of those who expressed a preference for an engineering major were male and 19% female. After attrition and movement between schools, 84% of those graduating with an engineering major were male and 16% female. The final set of columns shows that among those who graduated the number of students that left E&W for other schools was 26 men and 17 women. This does not include the overall attrition from USNA of about 10%

These figures provide information about the extent to which the school is attracting and graduating students and demographic patterns. Information can be compared for class years 2020, 2021 and 2022 within and across schools and against the USNA total in the final row.

The table below shows that differences between midshipmen who identify solely as White/Caucasian compared to the aggregate of other racial/ethnic groups (excluding international students and those who declined to provide racial/ethnic information) have similarities to the patterns for gender. Less represented groups of women and minorities are underrepresented in Engineering & Weapons and overrepresented in Mathematics & Science. Graduates who do not receive a degree in the school of their preferred major generally graduate from Humanities & Social Sciences.

Table 2.2 Major's School Preference and Graduation by Race/Ethnicity

Class Years 2020-2022		School Preference Graduates (Plebes)		Final Major of Graduates		Preference Percentages		Final Major Percentages		Delta for Graduates Preference vs Degree at Graduation (by Schl)	
		White	Minority	White	Minority	White	Minority	White	Minority	White	Minority
E&W	2020	258 (273)	110 (126)	234	91	70%	30%	72%	28%	-24	-19
	2021	226 (238)	110 (120)	200	91	67%	33%	69%	31%	-26	-19
	2022	204 (211)	94 (104)	175	87	68%	32%	67%	33%	-29	-7
HUMSS	2020	212 (239)	117 (140)	231	135	64%	36%	63%	37%	19	18
	2021	235 (245)	113 (134)	263	137	68%	32%	66%	34%	28	24
	2022	237 (257)	113 (128)	263	133	68%	32%	66%	34%	26	20
M&S	2020	197 (211)	108 (124)	202	107	65%	35%	65%	35%	5	-1
	2021	223 (237)	164 (183)	220	159	58%	42%	58%	42%	-3	-5
	2022	252 (270)	173 (190)	255	160	59%	41%	61%	39%	3	-13
No Major	2020			1	2			33%	67%		
	2021			1				100%	0%		
	2022			1	3			25%	75%		
Total		2044 (2181)	1102 (1249)	2046	1105	65%	35%	65%	35%		

Representation of female and minority midshipmen varies considerably by major. Appendix A contains charts showing the last three years for graduation rates by major for female, male, white and minority populations alongside the most recently available national completions data.

#### Goal three: Assessment of the core curriculum.

Previous assessment reports to the AEB contained information about midshipman development related core learning outcomes from department led assessment results, and these direct assessments of student learning are still key to understanding the extent to which the core is effective and midshipmen are meeting expectations. However, the Class of '22 responded to a survey in the weeks preceding graduation that asked these soon to be graduates questions related to their experiences over the 47-month program including the extent to which academic experiences contributed to development of core learning outcomes. While the complete set of results is available from IR. This report will focus on the academics section primarily as it relates to the core curriculum. This survey of midshipman perceptions about their USNA experiences and faculty assessment of student learning in the core supports Strategic Plan 2030 Goal 3, Objective 4, to, "Support continuous improvement processes and adopt best practices in higher education..."; and the Master Academic Plan goal of emphasizing assessment in academics, using evidence to guide decision making, and supporting curriculum changes with assessment results.

A high proportion of midshipmen (60%) responded to the survey between 12 weeks and graduation. Still, results from the survey, should be interpreted with caution as the experiences of the Class of '22 were significantly impacted by covid. Additionally, survey results in and of themselves, while compelling, will rarely if ever be the sole piece of data used to suggest curricular or pedagogical changes.

Midshipmen were asked to indicate their satisfaction with USNA programs. Eighty-one percent (81%) of 1/C mids indicated that they were "satisfied" or "very satisfied" with the academic program. For reference the only area higher was the overall USNA combined satisfaction rate of 84%. The percentage of midshipmen who perceived their academic experiences to have contributed "a lot" or "quite a bit" to

competence in the core curricular learning outcomes varied considerably from a low of 62% to a high of 90%.

Table 3.1	Class of 2022 Graduating Midshipman Survey				
	"To what extent did your <u>academic experiences at USNA</u> <u>contribute to your competence</u> in these core curriculum learning outcomes?" (n=568)  "A lot" or "Quite a bit"				
Apply leadership skills	76%				
Reason morally/ethically	82%				
Apply principles of naval science	68%				
Solve Technical Problems	90%				
Communicate effectively	89%				
Critically reason	90%				
Understand American heritage	62%				
Interpret past and current world events	74%				
Demonstrate intellectual curiosity	83%				

To better understand midshipmen thinking regarding how they interpreted and answered these items will require additional information which may include analysis of comments and potentially focus groups and/or interviews. This may be an area in which there can be a collaboration with other cost centers seeking to understand survey results. Comments provided by midshipmen regarding their academic experiences provide some information.

As the 81% satisfaction with the academic programs suggests, many midshipmen were pleased with academics and many made a point to indicate that they both learned a lot in and enjoyed their majors courses. Perceptions shared about the core were not as universally positive, in particular the STEM focus, and as the 47-month program is much more than academics, midshipmen also pointed out that other experiences may contribute more to their development than academic "classroom" experiences. There was a general desire for more applied experiences, life skills workshops, and training that may, at least in some cases, fall outside college education. A complete set of comments is available from IR.

This information may complement, but cannot replace faculty-led assessment of the core curriculum. Department members regularly assess the core courses that they offer and use that information to improve learning; e.g., adjustments to teaching strategies, course sequencing, assignments. Faculty indicate the extent to which midshipmen are meeting or exceeding expectations based on performance on exams and assignments in the core courses. This information is further aggregated by the division or school and then finally aggregated to provide an overview of achievement by the APAA. Table 3.2 provides information from the academic year 2022 collection cycle<sup>1</sup> for courses offered to 1/C midshipmen and the combined scores across all classes.

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<sup>&</sup>lt;sup>1</sup> Data for aggregation was provided from the 5 schools/divisions, 14 departments, and 31 courses.

Table 3.2	2022 Core Curriculum Assessment Reporting  Percent of midshipmen that met or exceeded expectations based on faculty assessment of students.				
	% of Midshipmen in 1/C Core Courses <sup>2</sup>	% of Midshipmen from courses across all semesters			
Apply leadership skills		80%			
Reason morally/ethically		81%			
Apply principles of naval science	85%	79%			
Solve technical Problems	77%	69%			
Communicate effectively	95%	82%			
Critically reason	82%	81%			
Understand American heritage		80%			
Interpret past and current world events		80%			
Demonstrate intellectual curiosity		79%			

It is noteworthy that in several instances faculty evaluations of competence, as measured in core courses Table 3.2, varied considerably from midshipman perceptions of how much the academic program contributed to ability Table 3.1; e.g., solve technical problems and understand American heritage. Undoubtedly the difference in language partially contributes to this mismatch. Additionally, midshipmen may view the Naval Academy academic program as being the primary contributor to their ability to solve technical problems regardless of their actual level of knowledge and ability; whereas, prior education and experiences, summer training, etc. may be viewed as having an equal or greater contribution to development in other core areas.

Goal four: Supporting faculty development.

The Academic cost center will retain the goal of monitoring the indirect cost recovery model and ensuring that funds realized through indirect cost recovery are sufficient to fully-support reimbursable work at USNA. Further movement to right-size the rates charged to reimbursable sponsors will require assistance from senior USNA leadership outside of the academic cost center. This is consistent with Strategic Plan 2030 Goal 3, Objective 1: Ensure sufficient staffing and operational resourcing and the Master Academic Plan goal of Maintaining faculty as disciplinary experts by, "Support[ing] research by recovering indirect costs."

The indirect cost recovery model has been adjusted to the following. A 10% overhead cost will be applied to all Department of Navy reimbursable research funding documents (e.g. ONR, NRL, etc.), as well as to all NSF funding documents. A 15% overhead cost will be applied to all Government but non-Navy reimbursable research funding documents (e.g. AFOSR, ARO, NASA, OSD, NSA, etc.), excluding NSF. And a 20% overhead cost will be applied to all reimbursable research funding documents associated with

<sup>2</sup>1/C courses providing assessment data EA400, EN400, EN401, EW410, EW412, NL400, NS431(SWO)

University, Industry and Other efforts (e.g. CRADAs, etc.). These percentages apply to salary (including fringe benefits), supplies and travel portions of a budget. This change went into effect October 1st. Funding recovered will be monitored to determine if the new model is able to fully support reimbursable work at USNA.

The cost center has formalized the instructor titling program for rotational officers consistent with Strategic Plan 2030 Goal 2, Objective 2, to "Develop and retain faculty, staff, and coaches who educate and inspire the Brigade. Increase professional development opportunities for USNA team members to learn and apply best practices in pedagogy, coaching, and support services and to advance as experts in their fields," and the Master Academic Plan goal of maintaining faculty as disciplinary experts.

The Center for Teaching & Learning (CTL) requirements to obtain the title of Master Instructor were set out in Provost Instruction 1520.2D Academic Titles for Military Faculty. Master Instructor is defined as an "officer with a relevant Master's degree and four or more semesters of superior classroom performance at the Naval Academy who has completed USNA's Center for Teaching and Learning's Master Instructor Program. Consideration for awarding this academic rank will be based on the recommendation of the respective department." Pursuing the title/rank of Master Instructor remains voluntary, but in addition to a relevant master's degree, four semesters teaching at USNA and the chair's agreement, the title now requires professional development activities to grow as educators by learning and using effective teaching strategies and best pedagogical practices. The learning outcomes for CTL's Master Instructor Program are:

- Understand brain-based learning and how learning works
- Articulate a teaching philosophy
- Incorporate active learning strategies into teaching practice
- Engage with the Scholarship of Teaching and Learning
- Develop a practice of reflective teaching

A selection of activities, of which a subset is needed to meet program requirements, have been identified by CTL and are regularly offered including attending:

- "Teaching 101" (typically offered the second week of August)
- 10 sessions of "Foundations of Teaching" (offered Thursdays, 1200-1250, August-June)/Discussions on James Lang's *Small Teaching: Everyday Lessons from the Science of Learning*
- USNA's Annual Conference on Teaching & Learning (held the third week of May) and submit a reflection on at least one session
- a class taught by a colleague—this may be a class offered as part of Trident Days (held in October)

And preparing four written reflections on teaching:

- 1 brief (2 pages) review of a book on teaching & learning (in addition to Lang)
- A short description of how you implemented one idea from Lang's book in class and what you learned from the experience
- A brief discussion of one of the conference sessions that considers how you might implement something you learned
- A reflection on the class you attended

### Substitute activities are:

- Have a colleague attend one of your classes and discuss their observations with you
- Have a FACT (Formative Analysis of College Teaching -- available from the Center for Teaching

- & Learning between the sixth and twelfth weeks of the semester)
- Watch a FACT (contact Dr. Carolyn Judge or Dr. Karyn Sproles to arrange this)
- Present at or organize a panel for USNA's Annual Conference on Teaching & Learning

This instruction goes into effect for rotational officers who begin teaching at USNA after the spring semester of AY22 and evaluation of the program will begin with this first cohort.

#### PART THREE: Goals and Outcomes for Academic Year 2023

During the coming year the Office of the Academic Dean & Provost has decided to assess the following three areas:

- 1. Supporting midshipmen through the Plebe Seminar. This goal is to assess the effectiveness of the plebe seminar and supports **Strategic Plan 2030**, **Goal 3**, **Objective 4**, to, "Support continuous improvement processes and adopt best practices in higher education...to meet the evolving needs of the Navy." based on feedback received from naval leadership and the **Master Academic Plan** goal to, "Continue to develop and promote the Plebe Advising & Mentoring Program, Assist plebes to choose a major..."
- 2. Equity, Diversity, & Inclusivity in terms of fostering a climate that is supportive of the recruitment of faculty and staff from underrepresented groups; creating an inclusive culture; and monitoring student demographics. This assessment goal supports **Strategic Plan 2030**:

#### a. Goal 1

- i. **Objective 1** with regard to valuing the lived experiences and diversity of the Brigade of Midshipmen
- ii. **Objective 4**: Strengthen the environment within the Brigade to be more inclusive, where all are treated with dignity and respect and in which our diversity makes us stronger leaders, better shipmates, and more productive citizens.
- b. **Goal 2** to cultivate a vibrant and inclusive community of role models, continuous learners, and leaders who develop the Brigade and contribute back to their professional communities and more specifically with
  - i. **Objective 1**, to attract a highly qualified, diverse cadre of faculty, staff, and coaches who model the highest professional standards
  - ii. **Objective 2**, to develop and retain faculty, staff, and coaches who educate and inspire the Brigade.

And also, the goal of "Advancing and enhancing equity, diversity, and inclusion."

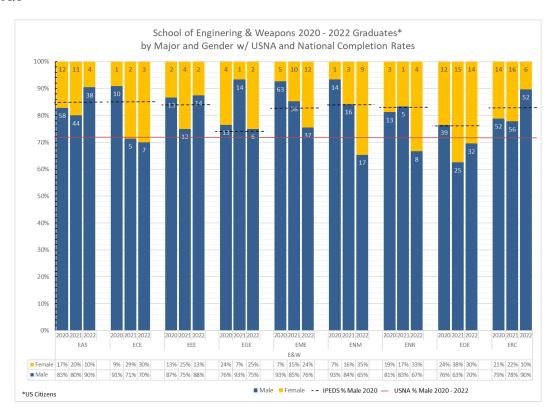
3. Core curriculum assessment. This assessment goal indirectly supports **Strategic Plan 2030 Goal 3, Objective 4**, to, "Support continuous improvement processes and adopt best practices in higher education..."; and the **Master Academic Plan** goal of emphasizing assessment in academics, using evidence to guide decision making, and supporting curriculum changes with assessment results.

Current and previous Academic Institutional Assessment Reports will be posted to the Academics webpage after the AEB review is complete.

#### Appendix A:

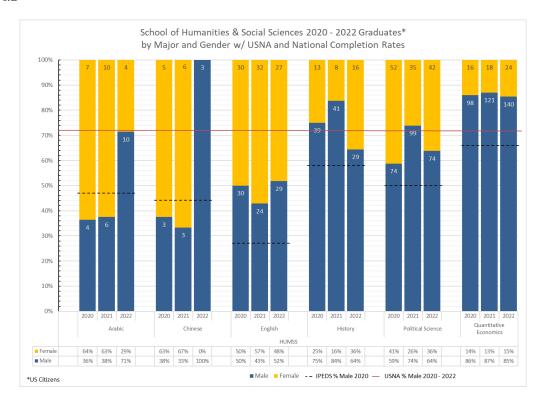
The blue and yellow bars and data table below show the percentage by gender breakdown for each major for the last three graduating classes; notations within the bar chart indicate actual numbers of graduates. The solid red line (\_\_\_\_\_) shows the USNA average percent male (72%) across the last three years, and the dotted black lines (----) indicate the U.S. national average of male graduates in these fields in 2020.<sup>3</sup> Neither the USNA nor the national data include international students. The USNA and national averages are provided per the request of Academic Assembly members to facilitate reflection, conversation, and as appropriate action on challenges in these areas.

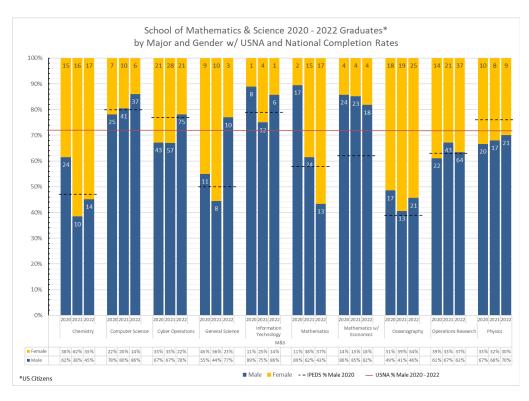
To read the chart below, the first column represents graduates from the Class of 2020 in the Aerospace Engineering major. As the table and the bars show, 83% of graduates (58 midshipmen) were male and 17% (12 midshipmen) were female. This is compared to the 72% male average across USNA's class of 2020 - 2022 represented by the red line. The dashed line shows the 2020 national bachelor's of arts completions in Aerospace Engineering of 85% using the six digit CIP 14.0201 Aerospace, Aeronautical & Astronautical Engineering which USNA also uses for reporting completions information to IPEDS.



<sup>&</sup>lt;sup>3</sup> Most recent information available from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2020, Completions Provisionary Data Set: C2020 A. Retrieved July 12, 2020 from <a href="nces.ed.gov/ipeds/datacenter/datafiles.aspx">nces.ed.gov/ipeds/datacenter/datafiles.aspx</a>. Comparison data reported is for the 6 digit Classification of Instructional Program (CIP) codes that USNA uses for completion submissions.

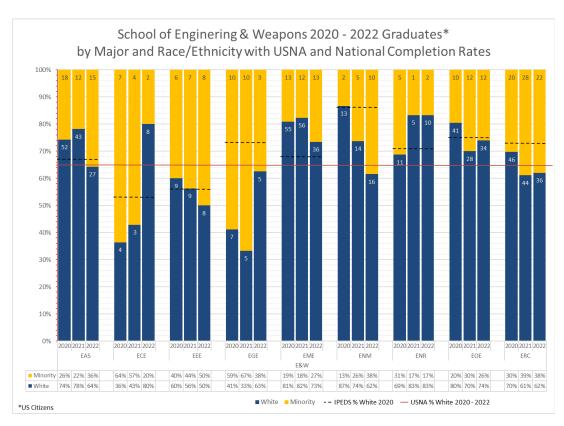
#### Chart A.2





It appears that female midshipmen gravitate to and graduate from disciplines where female role models and mentors are notably present. This is consistent with research that shows female students are more likely to take additional courses and perform better in their courses when the first class taken in the discipline is with a female professor.<sup>4</sup> Research suggests the same pattern is found for students from minority racial and ethnic groups.<sup>5</sup>

The bars in the following charts show the percentage by race for each major over the last three graduating classes. The red line (\_\_\_\_\_)shows the USNA average percent of graduates who identified as Caucasian/White for the last three years (65%), and the dotted line (---) indicates the U.S. national average of graduates, who were identified as Caucasian/White, in these fields in 2020. USNA averages do not include graduates who declined to provide racial/ethnic information and neither USNA nor national data include students who are non-resident aliens.



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<sup>&</sup>lt;sup>4</sup> Bettinger, E.P. and Long, B.T. Do faculty serve as role models? the impact of instructor gender on female students. American Economic Review, 95(2):152–157, 2005; Carrell, S.E.; Page, M.E.; and West, J.E. Sex and science: How professor gender perpetuates the gender gap. The Quarterly Journal of Economics, 125(3):1101–1144, 201; and Porter, C. & Serra, D. 2017. "Gender differences in the choice of major: The importance of female role models," Departmental Working Papers 1705, Southern Methodist University, Department of Economics.

<sup>&</sup>lt;sup>5</sup> Fairlie, R., Hoffmann, F., & Oreopoulos, P. (2014). A Community College Instructor Like Me: Race and Ethnicity Interactions in the Classroom. The American Economic Review, 104(8), 2567-259 and Gershenson, S., Hart, C. M., Hyman, J., Lindsay, C., & Papageorge, N. W. (2018). *The long-run impacts of same-race teachers* (No. w25254). National Bureau of Economic Research.

<sup>&</sup>lt;sup>6</sup> Most recent information available from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2020, Completions Provisionary Data Set: C2020 A. Retrieved July 12, 2020 from <a href="nces.ed.gov/ipeds/datacenter/datafiles.aspx">nces.ed.gov/ipeds/datacenter/datafiles.aspx</a>. Comparison data reported is for the 6 digit Classification of Instructional Program (CIP) codes that USNA uses for completion submissions.

# Chart A.5

