REPORT OF THE WASC VISITING TEAM

EDUCATIONAL EFFECTIVENESS REVIEW

To the California Maritime Academy

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In Partial Fulfillment of the Requirements

for Reaffirmation of Accreditation

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A.   Description of Institution and Visit

The California Maritime Academy (also referred to as Cal Maritime or CMA), a campus of the California State University System (CSU), continues to be in a period of growth and change. Cal Maritime is moving from an academic institution focused completely on preparing its graduates for careers as licensed officers on ships to a broader focus on all aspects of maritime affairs and transportation, including students who will not attempt licensure. The Capacity and Preparatory Review (CPR) visit team commended "how well Cal Maritime has accommodated to the incentives of the CSU system in growing student enrollment, enhancing academic quality, and improving its facilities, and how well Cal Maritime has utilized Cal State's additional financial resources." The unique character of CMA as a uniformed student body and as a maritime focused educational system has been mostly preserved while adapting to the imperatives of being a member of the CSU system.

Cal Maritime is located on a 75-acre waterfront campus in Vallejo, California, approximately 30 miles northeast of San Francisco. A defining feature of the institution and the campus is the 500-foot training ship *GOLDEN BEAR* docked on the campus. The residential campus is home to 898 full-time students seeking undergraduate degrees in business, technology, global studies, engineering, and transportation. A new graduate program in transportation and engineering management is being launched in 2011.

The Cal Maritime WASC Educational Effectiveness Review (EER) Visiting Team, with support from Richard Winn, WASC Liaison, visited the campus on March 2 – 4, 2011. The EER Team was well supported by Graham Benton, the Cal Maritime Accreditation Liaison Officer, and well received by all the faculty, staff, and students who went out of their way to assure that our visit was enjoyable as well as productive. *(Note: The EER visiting team underwent substantial personnel changes from the CPR visit. These changes reflected a desire by WASC to better tailor the team to the unique maritime character of CMA as well as the unavailability of some of the original members due to life events.)*

In 1929, the California Legislature established Cal Maritime as the **California Nautical School**. The school's mission was "*to give practical and theoretical instruction in navigation, seamanship, steam engines, gas engines, and electricity in order to prepare young men to serve as officers in the American Merchant Marine.*" By 1930 a training vessel and a school site were acquired, the original location of what would become Cal Maritime was California City (now Tiburon, California) in the San Francisco Bay Area.

Due to the Great Depression, the early days of the Academy were full of financial uncertainty. As early as 1933, some state legislators were calling for the school's abolition. In order to save money, the cadets and instructors alike lived and held classes aboard the training vessel, the *T.S. California State*. Only after the passage of the Merchant Marine Act of 1936 did the funding for the Academy stabilize.

In 1939 the California Nautical School adopted its present name, the **California Maritime Academy**. By 1940 the Academy was granting Bachelor of Science degrees and Naval Reserve commissions to its graduates; this step marked the beginning of the transition from the status of trade school to college. During World War II the Academy moved to its present location in Vallejo, California in 1943.

In the 1970s, Cal Maritime became a four-year institution. In 1996 Cal Maritime became the twenty-second campus of the California State University system. The new affiliation improved the academy's funding prospects considerably. The current training vessel is the *T.S. Golden Bear*, and is the third training ship to carry that name.[1]

The CMA was first accredited by WASC in 1977 and was most recently re-accredited in 2002. A CPR visit was held in March 2009. The CMA was granted an extra year to respond to issues raised by the CPR. In both the 2002 and 2009 visits, assessment was identified as an issue for particular attention.

At the time of this EER visit, CMA has opened enrollment for a graduate MS program in Transportation and Engineering Management, to be delivered by asynchronous Distance

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[1] The preceding five paragraphs are paraphrased from "A Brief History," available at www.Csum.edu.

Learning. CMA has received WASC approval for this sub-change. Currently there are no Distance Learning programs or auxiliary campus locations.

B.   The Institution's Educational Effectiveness Review Report

Alignment with the Proposal and Quality and Rigor of the Review and Report

The CMA WASC Steering Committee met during the summer and fall of 2009 to discuss the content and framework of the Educational Effectiveness Report (EER). The Committee recognized the need to align the EER with the language related to the four objectives in the Institutional Proposal, namely, Intellectual Learning, Global Awareness, Applied Technology, and Leadership Development. The Committee and its various sub-committees developed a four-part structure for the essays about these areas that constitute the bulk of the EER. In addition, the Integrative Essay responds to the Commission's June 26, 2009 letter that Cal Maritime should include in its EER Report — campus-wide engagement and reflection on the general state of learning at the institution. There are additional CFRs that are addressed in this EER, as well as specific recommendations by WASC, which are not directly relevant to the four essays.

The CMA WASC Steering Committee rightly concluded that organizing the Self-Study in this manner — with the WASC Standards and Criteria for Review integrated into these essays — would best reveal CMA's particular educational strengths and areas in need of improvement. It can be concluded that the EER is aligned with the CMA proposal as well as the CPR Report of May 2009 and the Action Letter of June 2009.

Quality and Rigor of the Review and Report

The review itself is well written and organized and is based on the engagement of many people across the institution. In fact, widespread engagement and input is a sign of the rigor of the review and contributes to its quality. Of course, the primary purpose of the accreditation process is to motivate campus communities to be reflective regarding their mission, vision, and learning outcomes. As noted in the report:

> *At a small institution of higher education such as Cal Maritime, the multiple demands placed on faculty, staff and administration to ensure the delivery of a quality education to our students often leaves little time and resources to self-reflexively evaluate the very mechanisms and procedures, which comprise that process. It has been, therefore, extremely valuable to put together the Educational Effectiveness Review Report as this*

has given us the opportunity to critically reflect upon the system as a whole. We are pleased with what we have accomplished; however, we acknowledge the areas that still need improvement.

CMA has done an excellent job of identifying its accomplishments as well as areas in need of improvement. Of special interest is the extent to which the EER has elevated the awareness of the need to focus on teaching and learning and its assessment, which has resulted in the creation of the Institution-Wide Student Learning Outcomes and their alignment with Program Outcomes and the creation of the comprehensive Institution-Wide Assessment Council. In addition, the Unity Council (aka Committee on Unity and Diversity) is addressing issues of diversity while the Leadership Development Integration Committee guides the future of the Leadership Development component of CMA. While this work has just begun, it appears to provide a sound foundation for continuous improvement in relation to the four compass points that guide CMA as evidenced by the discussion of the data provided in the integrative essay.

The Visiting Team concludes that the EER report and appendices as well as the materials in the Team Room and discussions with the campus community are of high quality and rigor. CMA is to be congratulated for these achievements given the many challenges it has faced over the last several years.

C.   Response to Previous Commission Issues

A number of issues were identified in the 2002 WASC accreditation report and subsequent Commission Letter, the 2008 CPR report and subsequent CPR Team report, and Commission Letter of June 26, 2009. Except where they overlap with the four themes of the EER, these issues were addressed primarily in the EER Appendices and Required Data Exhibits, Appendix II WASC Recommendations from Capacity and Preparatory Review and Appendix III Tables, A (To Address 2008 Changes to the CFR) and B (Addressing 2008 Requirements of the Institutional Review Process for the EER). These responses are summarized next.

Diversity: CMA's diversity related activities in response to the CPR Team Report (Recommendations #1-2, p. 21) and the Commission Letter (p. 2), are summarized in the EER Appendices and Required Data Exhibits, Appendix II WASC Recommendations from Capacity

and Preparatory Review (pp. 6-5), as well as the Action section of Essay 3: Leadership Development in the EER.

Section I of this report provides the team's findings related to the CMA diversity initiatives. In general, many different activities have been undertaken to address diversity issues with some success. However, much work remains. These activities are organized in a Diversity Delivery Plan developed by the Diversity Council that will guide future efforts in this area.

Student Life: The CPR Team Report, Recommendation #4 (p. 22) identified the need for both increased and improved facilities and staff to support Student Life. Although budget cuts from the CSU system have made this difficult, improvements in these areas, especially to the facilities of the *Golden Bear*, are evident. In addition, both the National Survey of Student Engagement (NSSE) and the Educational Benchmarking, Inc. (EBI) instruments have been administered to provide information from students on their engagement and satisfaction with student life at CMA. The subsection on Process in EER Essay 3: Leadership Development describes many different aspects of student life at CMA that have a positive impact on the student experience.

Shared Governance/Internal Communication: The CPR Team Report, Recommendations #5-7 (p. 21), identified issues related to governance and communication. The responses to these recommendations are in Appendix II; the action section of Essay 1: Intellectual Learning; and Appendix VII, Exhibit X, the Academic Master Plan. In order to facilitate internal communication the new CMA website has a portal that brings together in one location many of the resources faculty and staff regularly use, including the academic delivery platform Moodle, PeopleSoft databases for student records, and R25, the campus calendar of events.

Regarding shared governance, "new criteria for the Retention, Tenure, and Promotion of Maritime Vocational Instructors have been written and approved as part of RTP Policy 526." These and other academic policies may also be found on the website.

The Provost is drafting a memo that clarifies the relationship of California Maritime Academy Councils, Boards, Committees and Task Forces. It was noted by the team that there are currently around 50 faculty and staff committees, which may be excessive for an institution of this size.

The EER team observed that since the CPR visit, there have been improvements in shared governance and, although limited, evidence of stronger shared faculty/administration decision-making was found.

Leadership: CPR Team Report, Recommendations #3 (p. 21), and #8-11 (pp. 22-23) concerned Leadership Development. Specifically, it was recommended that CMA re-examine the:

- Leadership Development Program with a view towards incorporating diverse perspectives;
- Integration of the Leadership program with the IWSLOs;
- Need to improve student conduct; and
- Incorporation of the Gold Standard into the curriculum.

Section II, C. provides an extensive discussion of Theme 3: Leadership Development in the EER. In general there still seems to be a lack of clarity regarding the structure, roles, and functions of the Leadership Development Program. In particular, there is a need for clarification regarding the Program's relationship to the Corps of Cadets, the relationship between the Corps of Cadets and the Commandant, and the place of the Leadership Development Program and the Commandant within the institutional leadership hierarchy as well as the education and training structure.

Assessment: The WASC CRP report (CPR Appendix VII, pp. 63, 119 and 133) stated, "Cal Maritime must create a culture of evidence through the effective assessment of data to facilitate institutional decision-making." In general, the EER report was much more substantive and analytical than the previous CPR, especially regarding Institutional Student Learning Outcomes, Program Review and Institution-wide Assessment. Assessment was a major sub-section of each of the four themes of the EER.

However, academic assessment continues to be an issue in spite of extensive work on the Institution-Wide Student Learning Outcomes (IWSLO); the building of a more rigorous Program Review Process, as outlined in the Academic Master Plan of March 2009 and described in the Program Review Guide; and the work of the Institution-Wide Assessment Council. Now it is a matter of institutionalization and sustainability. That is, these initial efforts must be nurtured so that they provide an adequate context for the adoption of a culture of evidence at CMA.

The response to the CPR Commission Action Letter regarding assessment is also discussed extensively below in sections F. Sustainability of the Educational Effectiveness Focus in H. Assessment Infrastructure. And, for responses to the 2008 Changes to the CFR related to assessment see items 1.2, 1.9. 2.3, 2.7, 2.10, 2.11, 4.4 in Appendix III Table A.

External Communications: The CPR Team Report, Recommendations #13-14 (pp.23-24), and University Identity topic in the 2009 Commission Letter (p. 2), identified issues regarding external communications and marketing given CMA's unique place in the CSU system, and recruitment and outreach opportunities in the general Vallejo area. Communication is addressed extensively in Appendix II (pp. 9-11). For example, in response to the CPR Team Report recommendations, CMA has just launched a new website that emphasizes its uniqueness, which is a great improvement over the previous version. In addition, marketing print materials have been updated and redesigned (with expanded emphasis on women and students of color).

There appears to be significant attrition between the freshman and sophomore years. This may be due to the realization that students have regarding the nature of the CMA program as a result of the mandatory first-year cruise and exposure to the Corps of Cadets culture. Improvements in the website and print materials, along with programmatic changes such as encouraging campus visits by candidates and the ship-based experiences during the freshman year should go a long way toward ensuring that potential applicants and newly enrolled students more fully understand the uniqueness of the CMA experience.

Recruitment primarily in the local Vallejo / San Francisco Bay area also presents difficulties because of the CMA's distinctiveness. Marketing to a broader California and western US regional student population may be more appropriate and successful.

Global Studies: CPR Team Report, Recommendation #16 (p. 24) focuses on the topic of global studies. The EER Theme 4 essay on Global Awareness is a discussion of CMA's response to this recommendation. In addition, a summary of the Global Studies response is presented in Appendix II (p. 12). The EER visiting team's review of the Global Awareness Theme appears in section D below. CMA has modified and strengthened its global and international academic offerings and

participatory cultural opportunities by creating variety of opportunities. The next step will be to develop and implement a sound assessment process to determine the degree to which students actually learn global awareness, cultural awareness, and respect and tolerance for diversity.

Educational Effectiveness: CPR Team Report, Recommendations #117-18 (p. 24), and Use of Evidence from the 2009 Commission letter (p. 2) focus on the topic of educational effectiveness. CMA's responses to these recommendations occur throughout the EER materials. For example, all of the theme essays are generally about educational effectiveness and they each have a section on Assessment in which efforts to measure educational effectiveness are described. This is particularly the case with Theme 1: Intellectual Learning.

As noted above many items in Appendix III Table A. (p. 13) are related to education effectiveness and its assessment. Appendix IV, section A contains an Inventory of Educational Effectiveness Indicators. Appendix VII section J contains exhibits of recent assessment projects and published results. The establishment of Institution-Wide Student Learning Outcomes (IWSLO), the building of a more rigorous Program Review Process, and the work of the Institution-Wide Assessment Council all provide a firm foundation for the enhancement of educational effectiveness at CMA.

Planning: CPR Team Report, Recommendation #15 (p. 24) and "University Identity" from the 2009 Commission Letter, (p. 2) concern CMA institutional planning. The CMA Academic Master Plan (dated March 2009) in Appendix VII, Exhibit X, provides an extensive and complete description of the planning process and its results. This plan provides the framework for the continued improvement of CMA. CMA's identity as part of the CSU system is discussed below under section J. CSU Identity.

MS program Sub-change: The Extended Learning Center submitted a sub-change for an asynchronous Distance Learning graduate MS program in Transportation and Engineering Management (that was recently approved) and is accepting students for the fall of 2011.

SECTION II

EVALUATION OF INSTITUTIONAL EDUCATIONAL EFFECTIVENESS

UNDER THE STANDARDS

THE CAL MARITIME EER THEMES

A.   Theme 1: Intellectual Learning

The first theme of the CMA EER addresses programming issues surrounding the education and training of individuals who enter the Maritime industries (Coast Guard, Ship and Dock, International Relief, etc.) as well as more recent programs preparing students in International Business and Maritime Policy and Management. Based upon Benjamin Bloom's hierarchy of educational objectives, CMA defines Intellectual Learning as finding "the proper balance between a philosophy of liberal education and the need for specialized technical and program-based knowledge." While this is partly in response to their joining the CSU system, it is also an acknowledgement of the need for their students to move from a Maritime trade *training* approach to a more broadly based *education* in liberal arts, theory and global issues.

CMA is distinct in the CSU system because of its deep applied-learning educational model. Students learn by doing — working on the ship (they actually run the ship during the cruise with assistance from their faculty and advisors). Their duties include the building and maintenance of systems and equipment and simulation of simultaneous events. In addition, Cadet training takes the form of watchstanding and periodic morning formations. All of these activities create a holistic educational experience that recognizes how students gain knowledge and expertise, as well as how to build character and leadership.

For those students who successfully complete their first term/year and continue to graduation, this dual education (applied and intellectual) allows them to graduate with clearly defined skills and knowledge. As a result, placement rates for these graduates are amongst the highest in the CSU system.

Another aspect of this duality is the enhanced need for both professional and academic faculty. Professional faculty, especially adjunct, bring current technical and best practice experience to

the students, allowing the curriculum to adapt to the quickly changing global fields of the Maritime industry as well as ever increasing complex and global issues of safety, policy and international exchange. One of the observations of previous accreditation teams and reports has been that practical skills overshadowed intellectual growth at CMA. CMA's response to this call for an intellectually challenging curriculum has been, in part, to invigorate their foundational engineering, sciences and mathematics programs, and to build new curricula and majors in business, policy and global awareness. The exchange between the licensure and non-licensure students (Coast Guard licensure is a requirement for students to succeed in Marine Transportation and Engineering Technology) provides a rich dialog between students not possible within specific disciplines. The students' extra-curricular activities reinforce the exchange of these varied points of views, knowledge and skills.

The CPR visiting team expressed satisfaction with the CMA Approach for the Educational Effectiveness Review, but recommended that additional work was necessary on the assessment strategies and data-gathering infrastructure to support findings. In response, CMA's Academic Senate, in 2009 produced and approved a set of Institution-Wide Student Learning Outcomes (IWSLO) to complement already established Department and Course student learning outcomes. These IWSLOs were based on the Essential Learning Outcomes developed as part of the Association of American Colleges and Universities (AAC&U) initiative, Liberal Education and America's Promise (LEAP), as well as CSU's Strategic Plan *Access to Excellence.* These IWSLOs were established as the foundation of the Institution-Wide Assessment Council (IWAC), charged with overseeing assessment practices and the process and schedule of program review. Program review is discussed under section F. below.

These efforts are thoroughly discussed under the five sub-sections of the Intellectual Learning theme:

A. Learning Outcomes on the Institutional and Program Levels;

B. The Program Review: Process and Progress;

C. Cal Maritime's General Education Program: Past, Present and Future;

D. The Campus Intellectual Environment; and

E. Research on Student Learning and Student Research Opportunities.

In addition, the Assessment, Discovery, and Action sections of the Intellectual Learning Theme as well as the EER Appendices and Required Data Exhibits provide extensive information on the response to the CPR recommendations regarding Educational Effectiveness.

The EER visiting team concludes that CMA has made significant progress in shifting emphasis from technical training focused on licensure to an institution committed to the rigors and breadth of higher education. The Global Studies and International Business programs have given the Engineering and Marine Technology programs greater depth and focus; the institutional focus on student writing and information fluency provide additional assessment benchmarks for student success. Finally, though more work needs to be done to integrate and systemize them, the Leadership Development components of both curricular and co-curricular activities provides CMA's students with a unique education combining intellectual study with applied learning and team building experiences.

B.   Theme 2: Applied Technology

The second theme of the CMA EER addresses the "use of direct experiential method, both in classes and through immersion in professional environments, with the objective of learning the skills, techniques, and attitudes appropriate" to the student's program (CMA EER, p. 20). Two institution wide student leaning outcomes (IWSLO) are associated with Theme 2:

> IWSLO-F: *Demonstrate competency in discipline-specific, maritime related fields.*
> IWSLO-G: *Define a specific need for information; then locate, access, evaluate, and effectively apply the needed information to the problem at hand; and effectively use simulators, computers and computing applications in order to create, access, store, process, analyze, and communicate information.*

The CPR visit highlighted a few issues related to Applied Technology. With respect to Special Projects and the Extended Learning Advisory Board, the CMA WASC CPR Review (p. 14.) stated, "it is not clear that the board will continue to function or how it will relate (or not) to the industrial advisory board." Staff action to address the issue of multiple advisory boards is underway but not complete.

An assessment of the impact of the Simulation Center STELAR was specifically requested for the EER (CMA WASC CPR, p.15.) The STCW audit complemented CMA on STELAR, the "facilities, simulators, laboratories, and training vessels provide an outstanding combination" (CMA Draft STCW Audit, App VII, p. 138). No further evidence of the impact of STELAR was found in the EER report. The rate of computer refresh across campus and the upgrading of the campus Wi-Fi network were also identified as an issue in the CPR (CMA WASC CPR, p. 15.)

CMA has programs to improve the practical training of mariners through Applied Technology. Each degree program lists Applied Technology implementation methods (Appendix VIII, Figure 2.1, p. 305.) All students participate in at least one summer cruise. While the outcomes, measures, targets and benchmarks for the summer cruise experience (CFRs 2.1, 2.2, 2.4, 2.5) were not fully documented for the Applied Technology theme, the assessment of Applied Technology was discussed in the EER. Five forms of assessment evidence were presented: surveys of sponsoring employers, the STCW audit, results of professional licensing and certification examinations, graduate placement statistics, and surveys of graduates, faculty, alumni, and employers. This evidence has the potential to strongly support CFR 2.7.

The survey of employers sponsoring co-ops, internships, and commercial cruise is an indirect measure of educational effectiveness. No evidence was presented of the response to these surveys in the EER, but they were much discussed during the actual visit as a valuable source of information about the success of the program.

A direct measure of achievement in the form of the scores for the Marine Engineering Technology program was reported in the EER (p. 26). A general target of 70%, following the STCW standards, has been set for most of the measures (CFR 2.4). The STCW audit demonstrated that the CMA complies with the program standards for instruction. This is important supporting evidence that IWSLO-F is being achieved.

The results of professional licensing and certification examinations for Marine Transportation majors were presented in Figure 2.4 of the EER. A target of 70% first time passing rate has been set, but not achieved. During the visit, plans were discussed to address licensing examination, including a pre-license review (CFR 2.4). The examinations results provide a direct measure of

program achievement and when fully integrated into an assessment system will strongly support CFR 2.7.

Graduate placement statistics for the MET program were presented showing that 85% of graduates were placed. No targets or benchmarks were identified, and expectations do not appear to have been set (CFR 2.4). This placement rate is evidence of the strong confirmation of the strength of the program by employers. The assessment of MET learning outcome 5 (function effectively and lead teams) received the lowest score. However, no explanation of this outcome was found in the EER.

A survey of graduates of the mechanical engineering program was presented. This indirect measure showed continuous improvement in one of three outcomes. No targets or benchmarks were identified, and expectations do not appear to have been set (CFR 2.4). Minutes of an annual meeting of the mechanical engineering faculty to respond to the assessment are a "best practice" for the rest of campus to emulate.

CMA has developed an Information Fluency Program that includes a standardized pre-test, formal course work, and a standardized post-test. The Information Fluency Program, although relatively new, is showing a measurable improvement in student performance. CMA is beginning to analyze the results of the standardized testing and to use that information to improve student performance by adjusting the curriculum. Appendix VII contained an assessment of the Information Fluency Program, addressing IWSLO-G. The assessment uses an Educational Testing Service instrument to measure information literacy. This direct measure shows passing rates of 80% for Marine Engineering Technology and 40% pass rate for Marine Transportation and Mechanical Engineering majors. Overall, fewer than 50% of the students received scores that would certify them by ETS standards. The report identified *defining* as the area of greatest need for student improvement. It is not clear how that assessment result has been communicated to the degree programs for action.

CMA has excellent facilities supporting the Applied Technology theme, including the Training Ship Golden Bear and world-class simulation facilities for navigation, piloting, and crisis management, among others. These facilities are supported by a mixture of state, federal, and

corporate funds and substantially contribute to the uniqueness of the CMA experience. There is strong evidence of significant improvement in these capabilities in the last two years.

Faculty members and students perform lab support; there is only a single part time staff person supporting both audiovisual and lab functions. Lab improvements have been accomplished as student design projects, which is a best practice.

Faculty members use the Applied Technology activities and facilities across campus for applied research. This scholarly activity has resulted in refereed and non-refereed publications and reimbursable research funding and has strong potential for increased scholarly and externally funded research.

The contributions of these facilities to the Applied Technology theme are so self-evident that paradoxically they are not well documented. In particular, the CPR team report requested an assessment of the effectiveness of the STELAR complex, and this team reiterates that request.

The team concludes that CMA has an extensive set of programs to address its Applied Technology theme. The team further concludes that CMA needs to continue to improve on its initial efforts to measure the contribution of these programs to cadet learning, and to use those measurements for continuous improvement. (CFR 2.6, 2.7) The team recommends that the assessment of the effectiveness of the STELAR complex, requested at the CPR visit, be conducted,

C.   Theme 3: Leadership Development

The third theme of the CMA EER is Leadership Development. This theme is somewhat unique for a California State University institution. However, by incorporating elements of accountability, adaptability, and initiative into the traditional chain of command approach to leadership, CMA has been able to bring the Academy's Leadership Development system into the 21st century. In addition, by defining leadership to include critical thinking skills and ethics, CMA has been able to conform to California State University expectations in an effort to cultivate "intelligent, responsible, conscientious, team-oriented graduates who can think critically and creatively while responding to stressful situations."

There are many different leadership opportunities available to CMA students as part of the academic and co-curricular programs and within the Corps of Cadets. The academic program includes many classroom and lab-based courses where team building and leadership skills are emphasized (e.g., Marine Survival and Emergency Response Operations). Co-curricular activities provide another venue for leadership development including involvement with the student association, athletics, clubs, residence life, and community outreach. Success in these areas is essential for CMA to secure its place as part of the California State University system.

The Corps of Cadets is in essence a leadership laboratory and provides the most coherent, comprehensive, and consistent means of leadership development regarding bearing, discipline, initiative, integrity, justice, loyalty, reliability, responsibility, selflessness, self-discipline, and tact. Success in imbuing these leadership characteristics through the Corps of Cadets structure will ultimately determine whether or not CMA is deemed successful in accomplishing its unique mission.

Evidence of success regarding the Leadership Development theme, therefore, begins during the Orientation Program when a new student joins the Corps of Cadets. Assessments as diverse as alcohol awareness and swimming proficiency provide evidence of new cadets' starting point. An examination at the end of the orientation tests their knowledge of academy history, culture, customs, and heritage. A student survey is used to determine their perceptions of the orientation's effectiveness as well as their accomplishment of expected learning outcomes.

Other ongoing Corps of Cadet activities provide direct evidence of success. These include formal and informal assessments (i.e., inspections) of appearance and comportment by cadet leaders. First Class watch standers are evaluated and given feedback by on-staff professionals. Changeover exams keyed to the maritime industry and related professions are developed by First Class cadets and administered near the end of the spring semester to assess the competence of the Corps. Successfully completing the exam is a prerequisite for advancing to the next class in the Corps of Cadets.

All of these activities have great potential for providing valid and reliable evidence of student learning. However, the EER noted that while a set of learning outcomes was established in 2007 and an assessment plan was put into place "the outcomes …did not lend themselves…to a system that could measure leadership… in part because there were too many to be assessed in a manageable timeframe." Subsequently actions were taken to address this condition.

The Institution-wide Leadership Development student learning outcomes (H, I, and J) relate to Leadership, Teamwork, and Personal Development; Professional Conduct; and Ethical Awareness, respectively. These outcomes are addressed across the curriculum with each program having specific learning outcomes associated with Leadership Development. In addition, there are courses that focus entirely on this theme such as Foundations of Leadership, Critical Thinking and Ethics, and Teamwork and Bridge Team Management. In particular, CRU 100 introduces cadets to many leadership concepts such as decisiveness, initiative, assertiveness, teamwork, communication, and comportment, which are reinforced in subsequent courses.

Assessment is embedded in both generic and specific courses. For example, DL 420 instructors gathered evidence about teamwork (Ability to function effectively on teams) though a capstone Watchstanding Simulation where, over time students rotate through four positions of leadership and team support. A rubric is used to evaluate student competency, for example, Organization and Teamwork includes Team Communications, Task Prioritization, Bridge Resource Management, and Composure. Each sub-competency is assessed on a three-point scale related to its constituent elements (e.g., Team Communications includes scales related verbal and non-verbal discussion, orders, and working interactions between and among the team members).

A table and graph displaying sample results from the Marine Transportation program show that, given a standard of 70%, six of eight scenarios met or exceeded this mark. However, based on an analysis of the data during the EER site visit it is clear that three sections with scores of 3, 0, and 2 contributed to the overall low scores on scenarios 3 (66.7) and 7 (63.3). In addition, three sections had scores of 6 on scenario 6 that resulted in an overall score of 70.0 for this scenario. Such results provide guidance for further investigation regarding the reasons behind the especially low scores for these sections. This level of investigation does not presently seem to exist at CMA.

As noted in the Discovery section of the Leadership Development, there "is the need for greater continuity through personnel changes and for a more systematic approach for integrating the various leadership development components on campus." This is a crucial discovery since in the past "too little attention focused on the largest part of [the] Corps of Cadets." This concern is reinforced in Appendix II WASC Recommendations from capacity and preparatory review, "Cal Maritime should conduct a campus level study to identify the factors that prevent Cadets from achieving behavioral outcomes such as those related to formation, uniforms, and personal conduct."

Serious consideration should be given to the educational and training roles and responsibilities of the Commandant within the overall organizational structure of CMA and the place of the Commandant in the education and training structure. In addition, it is not clear how the unique leadership aspects of the Corps of Cadets are being appreciated and utilized, except for those students in the marine disciplines. In addition, there are a variety of other leadership opportunities that are distributed across campus with what seems to be a lack of integration. The work of the Institution-wide Leadership Development Integrative Committee should document the actions that are taking to improve this essential component of the CMA student experience.

D.   Theme 4: Global Awareness

The fourth theme of the CMA EER addresses the concept of student global awareness based on substantive and applied knowledge of a wide range of international issues and cultural perspectives in response to CMA EER report (p. 39). CMA states that "our mission is to: Provide each student with a college education combining intellectual learning, applied technology, leadership development, and global awareness" (CMA Academic Master Plan, p. 2). CMA further states that its commitment to enhance opportunities for global awareness aligns with the California State University's master plan, *Access to Excellence* (CMA Academic Master Plan, p. 3).

There are three objectives and one expected outcome to help all majors learn about the world around them (CMA Academic Master Plan, p. 15):

Objective 1: Modify the cruise experience for GSMA and IBL students that would allow students in these majors to spend more time in port and less time at sea in order to more fully experience other cultures and traditions.
Objective 2: Develop cruise itineraries that will afford opportunities for more relevant, meaningful visits and presentations ashore.
Objective 3: Expand study abroad opportunities through CSU International Programs and foreign exchanges with other maritime academies.
Outcome 1: Increased global awareness for all majors.

The WASC CPR review team made three general observations regarding the achievement of CMA's global awareness objective, abstracted as follows (CPR, page 13):

1. Greater care should be taken to embed cultural awareness into the curriculum.
2. CMA's deans and chairs described their frustration in recruiting and retaining a diverse faculty. Despite these recruiting efforts, however, there seemed to be a lack of understanding within the faculty as to the additional benefits of diversity within the curriculum.
3. Faculty and students alike cite gainful employment as the primary marker of a successful educational experience. Little thought seems to be given to the education of the whole person as a citizen of the world.

The following sections discuss CMA's current educational processes for enhancing its commitment to global awareness (CMA's EER report, p. 40):

- The training Ship golden Bear and the Summer cruise
- Academic Programs
- Study Abroad Opportunities
- Co-ops and Internships, and the Commercial Cruise
- Additional International Experiences and Opportunities
- Campus Activities Promoting Global Awareness

The Training Ship & Cruise: Each of the degree-granting programs requires all students in the major to participate in at least one summer cruise; thus all CMA students participate in some form of international experience (CFR 2.2, 2.9, 4.1, 4.2, 4.6). CMA has attempted to integrate academic learning with specific activities in ports-of-call (CFR 2.9, 3.4, 4.2). A Global Awareness survey of summer cruise 2010 (EER Appendix VIII p. 311-313) is intended to assess these learning outcomes as suggested in CFR. 2.10. The team recommends further refinement in

wording, and assessment of Global Awareness Student-Learning Outcomes, and then the use of results to guide program improvement.

Academic Programs: CMA has expanded its academic majors by creating the Global Studies and Maritime Affairs major in 2003, and more recently by refocusing the Business Administration curriculum toward international business and logistics. A number of courses have been developed to study global issues and examine world cultures. In addition, foreign language requirements have been added to certain majors (CFR. 2.2, 2.8, 2.9, 4.2,).

Study Abroad: Students are offered the opportunity to study abroad for one semester or a full academic year (CFR 2.8, 2.9). The EER review team found that few students avail themselves of the study abroad opportunities. The CPR review team observed that the jam-packed structure of the curriculum and demanding academic requirements might be an impediment to taking a semester or year for international or national exchange; the EER review team concurs with the CPR finding and suggests that CMA investigate ways to facilitate greater participation in these opportunities.

Co-ops, Internships, and Commercial Cruise: CMA states that global awareness is an integral component of the School of Maritime Policy and Management, where there is a mandatory internship (CFR 2.2, 2.9). A review of the internship placements reveals that almost all of the internships are local or national.

Additional Experiences: CMA participates in several external programs that enhance the university's commitment to global awareness including: International Association of Maritime Universities; International Faculty conferences; Visiting Scholars Programs; International exchange students @ CMA; and, Peace Corps (CFR. 1.5, 2.8, 3.4).

Global awareness is a learning concept as broad as the globe itself and one that CMA hopes its students will embrace in order to develop a broad understanding of our world. CMA has made great strides in enhancing international aspects of the curriculum; refocusing its Business Administration major to have an international flavor; modifying and strengthening its cruise

experience so that there is greater cultural understanding when cadets visit ports-of-call; and including various other exchanges and opportunities to enrich global awareness.

The review team commends CMA for its efforts to access, modify and strengthen its global and international academic offerings and participatory cultural opportunities. They have created a rich array of offerings in an effort to promote global awareness. The concern that the review team has is the degree to which students actually learn global awareness, cultural awareness, and respect and tolerance for diversity. CMA is attempting to access student learning with various instruments and with its I-WAC, but the assessment seems to fall short of measuring the global awareness Student-Learning Outcomes (SLO).

It is the recommendation of the EER team that CMA refine its assessment of outcomes in student program like the cruise, internships, and exchanges. Further, the review team observed that CMA students would benefit from a greater understanding and appreciation of cultural, ethnic and gender diversity. The University community will be further enriched as CMA enhances its co-curricular programs and leadership training based on the clarification of the global awareness concept and the development of direct measures of its achievement.

REQUIRED ESSAYS

E.   Student Success

One of the measures of student success is graduation rate, that is, the percentage of those who graduate from CMA within six years. CMA could not produce consistent and accurate data on graduation rates, student retention; nor could they disaggregate the student data into cohorts or subsets. Some of the data provided were alarming in terms of high attrition rates, and when the EER review team questioned the data they were found to be erroneous.

CMA has produced a student graduation rate improvement plan (EER Appendix VII, p. 88), with the stated goal of increasing CMA freshman graduation rate 6 percentage points, from 53% to 59% by 2015 and to close the achievement gap for underrepresented students by half from 13% to 6.5%.

The plan creates a rubric of responsibilities for creating supplemental programs or improved graduation outcomes by specific years (CFR 1.5, 2.6, 2.10, 4.3). Of particular note is the hiring of a Registrar so that student data can be collected, analyzed and used in program review. Additional supplements or improvements targeted at graduation rates include: truth-in-advertising for admissions; academic advising and tutorial; mentoring programs; and, the addition of an Early Opportunities Program (recruitment and tuition supplement to first-time college students and underrepresented students). Specific enrollment plans and targets need to be developed regarding, for example, the number of transfers versus traditional freshmen per admitted class; gender composition; and ethnic composition and enrollments by major. The plan needs to be implemented through coordinated student recruitment and student retention efforts.

The EER review team was concerned by the lack of accurate student retention data. A new Registrar has been hired to develop an up-to-date student record system. When visiting with the Registrar it appeared that progress is being made in managing enrollment data and developing analytical tools that will facilitate a robust Institutional Research function. The review team strongly recommends that special attention be paid to enhancing the accurate recording, management, analysis and reporting of student enrollment data. In addition, Institutional Research data should be used as the bases for the assessment of student success and educational effectiveness and to guide improvements from the institution to the classroom level.

F. Program Review

As stated elsewhere in this WASC Team EER report, CMA has taken strides in establishing the tools for effective program review including: newly adopted Institution-Wide Student Learning Outcomes (IWSLOs); better department- and course-level student learning outcomes; the development of a Institution-Wide Assessment Council; and an overall improvement in the program review process and schedule. The Engineering Technology and Mechanical Engineering programs both produced interim 2010 (Accreditation Board of Engineering and Technology (ABET) Reports that were, overall, favorably received by the visiting ABET team.

A STCW (Standards of Training, Certification and Watchkeeping) Audit was conducted in March 2010 by the Maritime Administration (MARAD) and the U.S. Coast Guard (USCG). The

Audit team found CMA to have a "vigorous deck and engineering training program with strong evidence of STCW implementation." (EER Appendix VII, p. 138). Additionally, the Business Administration/International Business and Logistics program underwent a 2003 IACBE (International Assembly for Collegiate Business Education), with a reaccreditation scheduled in 2013. The IACBE's most salient recommendation was to improve Faculty Scholarly and Professional Activities. Although there were various recommendations for improvement included these review reports, the high degree of support from these various professional accreditation bodies indicates institutional and student success within the context of their various criteria.

CMA's Inventory of Educational Effectiveness Indicators (7.1) (EER Appendix IV, p. 22) lists all CMA and Concurrent Program Reviews. Most programs have completed or will complete their reviews in the years 2010-2012 using the new program review guidelines. In all cases of concurrent audits, the program reviews include professional requirements in addition to institution expectations. Faculty members are joined by outside reviewers and have administrative support for these reviews. The increased focus on IWSLOs and institutional best practices is evident in the program review reports and subsequent rubrics; it is clear that the Curriculum Committee and the Academic Senate are more fully engaged with each department's unique missions and curricula.

Overall, it is clear that CMA has made major improvements in its program review process that are proving to be effective in guiding successful internal and external reviews. These processes should continue to evolve as more departments use them so that they reflect lessons learned.

G.   Sustainability of the Educational Effectiveness Focus

As noted in the Integrative Chapter:

> *The sustainability of both the mission of the institution and the measurement of educational effectiveness lie in the alignment of [the four] quadrants of the compass.*

There are four "sustainability" areas related to CMA's mission and its Educational Effectiveness. The first sustainability focus concerns leadership development. A new integrative committee of faculty, staff, and administrators has been created on a permanent basis as part of the Provost's

Council in order to facilitate and drive Leadership Development objectives. It is essential that the work of this committee lead to a sustainable leadership development program at CMA since this is what sets CMA apart from the other CSU campuses.

The second sustainability area concerns the need to provide the evidence for making sound decisions. Hiring a Registrar was a major achievement because in the past there was no system for tracking credit hours, faculty work load, progress to degree, etc., and for using the information as the basis for decision making and, where needed, to guide change. The next step will be to initiate and sustain an Institutional Research function using the analytical resources developed by the Registrar for institutional effectiveness and academic (student learning outcomes) assessment.

The third sustainability area is the reinforcement of an attitude among the faculty that being a *professor* means keeping up with developments in one's discipline, conducting appropriate research, and, in particular, improving teaching and learning via evidence-based decisions. However, the faculty is new at these activities, especially what might be called the scholarship of teaching. Department chairs could model this behavior by considering assessment data when making decisions.

Clearly, the hard work needed to ensure sustainability in assessment of student learning (the fourth area) is only starting. For example, Appendix IV (A): The Inventory of Educational Effectiveness Indicators (7.1) shows that formal learning outcomes have been developed at the institutional level and the degree and non-degree granting programs (general education). (Only two support offices have not yet developed learning outcomes.) And plans are already underway to use the findings of learning outcomes assessment to make changes. However, given the newness of these activities there seem to be few actual results. In addition, the Integrative Chapter begins with the observation that "At a small institution of higher education such as Cal Maritime, the multiple demands placed on faculty, staff and administration to ensure the delivery of a quality education to our students often leaves little time and resources to self-reflexively evaluate the very mechanisms and procedures, which comprise that process."

It is clear from talking with the Institution-wide Assessment Committee, the Graduation and Retention Committee, Institution-wide Leadership Development Integrative Committee and curricular and co-curricular groups, that there is a widespread commitment to engage in assessment. However, actual assessment efforts are only beginning. In addition, with so many newly formed groups there appears to be little time or structure to facilitate communication among them which can result in duplication of efforts as well as gaps in assessment. Developing efficiency and coordination of assessment efforts will provide the basis for its sustainability.

SECTION III

RESPONSE TO THE CPR COMMISSION ACTION LETTER

H.   Assessment Infrastructure

The WASC Visiting Team CPR report (p. 23) recommended:

> *Cal Maritime must create a culture of evidence through the effective assessment of data to facilitate institutional decision-making. Cal Maritime should address issues of attrition and graduation, by gathering better information about why students leave early or stay on successfully. Such evidence could guide future decisions about recruitment, orientation, advising, and program requirements.*

CMA responded that this has been one of the primary objectives of Cal Maritime since the Institutional Proposal was submitted in February 2007. Several actions have been taken, including the creation of the position of Registrar to help with institutional research and the creation and approval of the graduation and retention plan. Besides showcasing a culture of evidence inherent in each essay of the EER, a comprehensive graduation and retention plan is contained in Appendix VII, Section.

In the Theme 1: Intellectual Learning essay, two examples of assessment were included. The first was the case study of written communication assessment, which demonstrated several good practices. The written communications case study demonstrated the effective use of direct measures (writing analyses and an external examination) and an indirect measure to assess the UW-SLO Communicate Effectively. Data were collected, and changes proposed for completion by Fall 2010 and Spring 2011. No evidence is yet available if the proposed changes have been implemented, or if they have been effective.

This case study provides a 'best practice' for the rest of CMA to emulate. Its approach was logical and it relied primarily on direct measures of student learning, in sharp contrast to other assessment approaches across campus. The Student Opinion of Instruction survey, by contrast, does not represent a best practice related to the direct measurement of learning. The survey requests student input on teaching while the larger question of whether or not the students met the learning outcomes is not addressed.

In the Theme 2: Applied Technology essay, five sources of evidence were discussed. Examples of direct evidence of learning include the results of professional licensing and certification examinations. In addition, graduate placement statistics were provided, and the results of the STCW audit were discussed. The surveys of sponsors of co-ops, internships, and commercial cruises and the survey of graduating seniors, faculty alumni and employers provide useful, but indirect measures of student learning.

In general, expectations do not appear to have been thoughtfully set for judging this evidence (CFR 2.4). There is a general lack of targets and benchmarks, which are needed to interpret the results and decide if action is needed. For example, 12 of 14 graduates were placed from the Marine Technology program in 2009. Does this require action or not? Was the goal 100%? 50%? How does this placement rate compare with other institutions? Where targets exist they are justified by the MARAD use of a 70% standard for licensing activities.

There is a hint of a target ("Although a 70% success rate was not achieved") in the discussion of the MET pass rates for the USCG licensing examination (CMA EER, p. 29), but that is the only mention of an expectation. Actions have been recommended in the EER to improve performance in the licensing examination, but no evidence is available yet as to how effective these actions have been or may be. In addition, the commercial cruise supervisors' survey rated student performance lowest on "Function effectively and lead teams." No indication is given whether this performance met expectations or if action is required. Evidence is being collected, but the use of evidence to inform decision-making is not well documented. (CFRs 4.3, 4.4, 4.5. 4.6)

In the Theme 3: Leadership Development essay, the three IWSLOs (H, I, J) dealing with leadership are discussed. Coursework with leadership content is identified (CRU 100, CRU 300, DL 320 DL 420, LDR 210, Critical Thinking, Ethics).

A case study of DL420 intended to demonstrate the assessment of this area is described in the EER. Students are assessed against four tasks (Team Communications, Task Prioritization, Bridge Resource Management, and Composure) using a three-point scale for each task, for a total of twelve possible points. 70% or 8.4 points is set as a passing score. As discussed above in section C, of the eight sections listed in the graph on EER page 36, five met this standard of

70%. This was interpreted as "a successful SLO, well about the performance requirement." No analysis was offered as to which of the four tasks accounted for the failure to score 70% and no remedial action was recommended. This case study demonstrates rudimentary collection, analysis and use of data, as the outcomes assessed are not leading to improvement even when measures do not meet the assigned target.

There was a discussion of the reasons leading to the discontinuation of the Gold Medal program in the EER. This discussion could have been improved by including a comparison of the performance of student exposed to the Gold Medal program to those students who did not participate in the Gold medal program using the leadership measures. The only data presented were participation rates, and none were presented on student performance as measured against the leadership outcomes established by CMA. Further, no data were presented on leadership scores by gender or other demographic variables. That is, data are not disaggregated which would support more sophisticated analysis. This does not indicate a culture of evidence.

In the Theme 4: Global Awareness essay, evidence was presented from student surveys of satisfaction with the training cruises of 2008 and 2010. No targets or benchmarks were presented for these indirect measures, and no direct measures were identified. The actions listed in the concluding section of the essay were not presented as having flowed from an analysis of the evidence collected in the assessment section. The discussion does not indicate a culture of evidence being used for decision-making.

In general, the WASC team considers CMA as being in the initial stage of effectiveness with respect to assessment infrastructure. Outcomes are assessed using surveys and self reports, seldom using direct measures, and rarely leading to the revision of curriculum, pedagogy, co-curriculum, or other aspects of the educational experience. (CFRs 2.4, 2.7)

CMA has instituted an Institution-Wide Assessment Council to sustain the assessment of IWSLOs (EER Report Appendix VII, p. 133). They have developed a five-year plan to review the IWSLOs. The Communication case study presented in the Intellectual learning essay is one of the first fruits of this effort, and so the IWAC shows promise to address many of the issues identified above.

Even though the IWAC is only beginning to collect data to support the five-year plan the writing study has prompted improvements in student mastery of the writing IWSLO, and the best practices of that study are diffusing across other programs and other assessments. CMA conducted an Institution-Wide Writing Assessment 2009-2010 (EER Appendix IV, p. 194) and plan to continue this on an annual basis. The executive summary states its purpose to:

> *Measure written communication through a variety of assessment instruments, including Graduate Writing Exam data, cross-disciplinary and campus-wide surveys, and data collection for multiple types of student writing.*

The data comes from: 1) student writing samples; 2) faculty attitudes surveys; and 3) comparative student test scores with demographic data. Standards were met in the first two but not the third; the technical fields were found to be "less likely to pass the Graduate Writing Exam than non-technical fields." The Writing Assessment's following rubrics and graphs generated by raw data includes findings, proposals for change and timelines for implementation. However, the initial success of the writing study has not been fully matched by the subsequent studies, as faculty participation has been less and no faculty incentives have been provided for participation. It is suggested that, unlike writing, there is less clarity about the other IWSLO. Therefore, efforts should be made at the outset to build a consensus among faculty and students regarding the definition, operationalization, and appropriate assessment methods for the other IWSLO in preparation for their evaluation.

The IWAC is co-chaired by the Accreditation Liaison Officer. This indicates that Assessment is viewed as an accreditation activity, but perhaps not as one central to the continuous improvement of the university. Members of the IWAC appear competent, engaged, and enthused. While the IWAC has developed a five-year plan for assessing the IWSLOs, ~~but~~ members are appointed for two-year terms, calling into question the ability to sustain efforts for any given IWSLO across its five-year cycle. The Provost supports the IWAC with a very small budget for summer stipends. Because the IWAC meets primarily in the summer, there are no licensed faculty members on the IWAC. In addition, the IWAC currently includes only representatives for the initial IWSLO to be assessed. It is suggested that representatives for all IWSLO be on the committee so that they can

learn from the other efforts in anticipation of the assessment of their SLO. This may mean both expanding and lengthening the duration of committee membership.

An alternative is suggested to the *once-every-five-years* cycle of assessment for each SLO, which is a multi-year sequence repeated every five years. The first year would be one of clarification and consensus building, the second one of actual assessment, and the third of analysis and interpretation that leads to the identification of strengths and areas in need of improvement. The two following years would be devoted to implementing suggested changes. Then the process would begin again in order to assessment the impact of changes. Therefore, during any one year a particular SLO would be in some phase of action: clarification/consensus building, assessment, analysis/interpretation, or implementation of change.

The WASC team feels that the IWAC has made a strong beginning to its work. Much more detailed planning, implementation and utilization is needed. It is critical that the IWAC effort be sustained and encouraged by CMA. In particular, the IWAC should plan for continuous data collection of performance measures for *all* IWSLOs, regardless of when they will be formally analyzed, in order to have comprehensive data for analysis on a five-year schedule.

CMA has recently established a position of Registrar and staffed it with a highly competent individual. The office of Registrar is beginning to establish data and analysis systems to support assessment and other institutional functions. IWAC members have not yet engaged the Registrar in their efforts, and should do so: the office of Registrar is a valuable resource. In particular, the *iStrategy* academic analytic systems under development should be used to integrate the IWAC assessment results into the institutional database. The addition of the Registrar office and the implementation of many Institutional Research functions have the strong potential to improve the culture of evidence at CMA by establishing automated, routine evidence collection and analysis.

The IWAC has not integrated the new MS program into its IWSLO assessment plan. As the first students are just being accepted into this program, this is the time to begin this integration and CMA is encouraged to do so.

The CMA Academy Delivery Plan for Improving Graduation Rates (EER Appendix VII, p. 89) is intended to respond to the issues of attrition and graduation identified by the CPR team. While the CPR team recommended, "gathering better information about why students leave early or stay on successfully," the key actions list only one data collection activity ("analyze statistics regarding recruited versus non-recruited athletes"). This plan does not demonstrate a culture of decision-making based on evidence. Of particular note, the plan does not feature the collection of information needed to understand the differential graduation rates of women and other underrepresented groups in the WASC summary data (EER Appendix IV, p. 39.)

In summary, the assessment infrastructure provides a reasonable basis for developing a culture of evidence at CMA. However, results show only recent or inconsistent use of data to improve learning. There is incomplete implementation of assessment of student learning outcomes and assessment plans at the course, program, and institutional levels. These should be a major focus of CMA over the next several years.

I.   Diversity

The CPR team recommended that CMA "consider and effectuate the curricular and pedagogical advantages of a more diverse faculty and student body" (CPR Team Report, Recommendations #1-2, p. 21; Commission Action Letter, p.2). There are several responses in the EER related to the diversity issues.

Unity Council: CMA has initiated a Unity Council (aka Committee on Unity and Diversity), *(EER, Appendix VII, p. 98)* to make more central "concepts of unity and diversity" within the campus community. The Unity Council is comprised of faculty, staff, students and administration personnel from Human Resources, Academic Affairs and Student Affairs. To date the Council has drafted a *Report of the Committee on Unity and Diversity* (December 9, 2009; Appendix VII, p. 98-118)*. It outlines a series of recommendations for new institutional programs and resources, and best practices around issues of diversity, tolerance and ethics, including the collecting of data through a diversity survey, diversity training, website resources and other initiatives.

Although the Unity Council's report outlined more planning than accomplishments, initiatives such as a woman's student group *The Riveters*, and *Safe Zones* for LGBTQ students, staff and faculty have been implemented. Materials and posters announcing these programs were seen across the campus and a new page entitled *Diversity at Cal Maritime* has been added to the website. New recruitment materials have been produced entitled *Women at Cal Maritime* and *Diversity at Cal Maritime*. It was stated in a meeting with the Unity Council that these two publications have increased student inquiries and applications. There is also an open recommendation for a permanent entity/individual (unfilled) on campus to be responsible for diversity initiatives. While it seems that women and people of color are more likely to apply and be accepted in the Global Studies and the ABS School of Maritime Policy and Management majors, both groups are represented in all majors.

Student Enrollment by Ethnicity and Gender, Retention and Graduation Rates: This area is one of the EER visiting team's greatest concerns. First, there are discrepancies between reported graduation and retention rates in overall headcount and FTE disaggregated by gender, ethnicity and program. The WASC Summary Data Table 2 lists overall freshman 6-year Graduation as 69% (EER Appendix I, p. 39). The goals specified in the *Delivery Plan for Improving Graduation Rates* (not included in the appendix), states that CMA plans to improve freshman graduation rates 6 percentage points from 53% to 59% by 2015, well below the number stated in the Summary Data Table. Further, the 6-year first-time freshman graduation rate in a report generated when the team was onsite also indicated a 69% graduation rate, well above the 54.5% stated earlier (see the table below). Transfer 6-year graduation rates were not available.

Sub-group	Headcount	First-time Freshmen 6-year Grad. Rate
Non-resident Alien:	12	N/A
Black Non-Hispanic	28	50.0%
American Indian/Alaska Native	9	50.0%
Asian/Pacific Islander	90	28.6%
Hispanic	78	50.0%
White/Non-Hispanic	48	69.8%
Unknown	133	74.2%
Male	719	68.7%
Female	179	82.6%
Total / Average	**898**	**68.7%**

Clearly there is a need for improvements in the collection, analysis and reporting of institutional data. And, if these numbers are correct, there is a need for attention to recruitment and graduation rated of underrepresented groups. However, women seem to be doing quite well given their 20% share of the student population.

The small headcount numbers in non-white non-male categories, in particular, shown in other reports may contribute to huge swings in 6-year freshman graduation rate percentages. Also, data sets are not disaggregated for major so that it is not possible to see if there are particular trends. The community is overwhelmingly male and white, in part due to CMA's curriculum and the current nature of the industry. However, as more CMA graduates seek to enter the Global Affairs and International Business areas, the lack of diversity may be detrimental to placement and student/alumni success.

Finally, the CSU system has changed CMA's enrollment goals up and down by as much as 6 percentage points in the last few years. This level of uncertainty complicates progress in the area of recruitment and retention. CMA has responded by forming a standing enrollment management committee whose members drafted the *Delivery Plan* mentioned above. However, the plan outlines too many action items and the committee would be better served by focusing on the most essential and potentially successful initiatives.

Faculty and Staff Diversity: In the time since the CPR visit, CMA has added more women and people of color to the adjunct faculty. According to the 2008 WASC Required Data Tables and 2010 Summary Data Report, the number of non-white full-time faculty has increased from 10 to 12 (full time faculty actually decreased overall from 84 to 62) and the number of female full-time faculty has increased from 9 to 13. In that same time period, the total number of part-time faculty has decreased from 31 to 25. However the number of non-white part-time faculty members increased from two to four and the number of female part-time faculty increased from three to six. This increase in non-white and female faculty, in spite of an overall decrease in the number of total full- and part-time faculty, shows overall improvement.

In Spring 2011, Human Resources implemented an *eRecruit* tool to allow faculty and staff applicants to apply online. Because of its broader outreach, this tool should increase the number of overall applicants for all positions thereby increasing the diversity of the applicant pool. No plans were presented as to how this pool of applicants would be assessed to ensure more diverse hiring outcomes. However, if combined with the need to reach out to underrepresented communities and training programs for selection committees, the tool should result in a more diverse faculty and staff in the future (CFR 1.5).

J. CSU *Identity*

CMA is one of twenty-three universities within the California State University system and is the most unique with its maritime, military-style, mission. Being unique within a system that has a common admission application and qualification standards presents some challenges for CMA. The EER team suggests that CMA should strengthen its market-place awareness; increasing potential student-applicant's awareness of CMA's rigor in the sciences, mandatory corps-of-cadet participation requirement, and mandatory ship cruises. The review team also suggests that CMA, much like Cal Poly San Luis Obispo, seek a unique status with the CSU Board of Trustees, allowing CMA to develop additional admission criteria that would ensure student awareness, academic preparation and *fit* with CMA's mission.

The review team found that CMA has a well-constructed master plan to guide its progress towards enhanced self-image, enrollment growth and academic mission. The team found that CMA is making progress in achieving the objectives in its Master Plan. The team encourages continuing self-critique and updating of the Master Plan to include strategic analysis of short-term and long-term funding and resource allocation.

The most immediate issue facing CMA is the CSU mandated budget reductions along with enrollment freezes, which is the same for all CSU campuses. CMA's budget is complex in that it receives funds from various sources, and CSU funding is a formula-based amount tied to FTEs. CMA has limited ability to increase enrollment or its CSU funding during this crisis.

One way that CMA can increase its enrollment and budget is through refining its message and marketing to enroll students with greater potential to be retained and graduate, especially

improving enrollments of women and minority students. Improved student retention will naturally increase enrollment, especially among upper-division students. Increased enrollments bring increased campus-based fees to the campus, even if the CSU does not add funds for enrollment increases. In a stagnant economy, CMA will need to increase its sources of non-state funds, including: endowments, industry support and research grants, and possibly even increased student fees. CMA may also find efficiencies in course offerings, increased enrollment and increased diversification of the student body by increasing the non-licensure majors, poly-technical majors and programs addressing the business side of the maritime industry.

SECTION IV

FINDINGS, COMMENDATIONS & RECOMMENDATIONS

K. Findings

The CMA WASC EER Steering Committee and the whole CMA community have done an excellent job of identifying its accomplishments as well as areas in need of improvement. Of special interest is the extent that the EER has elevated the awareness of the need to focus on teaching and learning and its assessment, which has resulted in the creation of the Institution-Wide Student Learning Outcomes and their alignment with Program Outcomes and the creation of an Institution-Wide Assessment Council. In addition, the Unity Council is addressing issues of diversity and the Institution-wide Leadership Development Integrative Committee guides the future of the Leadership Development component of CMA.

While much of this work has just begun, it appears to provide a sound foundation for continuous improvement in relation to the four compass points that guide CMA. The Visiting Team concluded that the EER report and appendices as well as the materials in the Team Room and discussions with the campus community are of high quality and rigor. CMA is to be congratulated given the many challenges it has faced over the last several years.

L. Commendations

Intellectual Learning

1. CMA is to be commended for its continued focus on integrating academic rigor, scholarship and the building of bridges between intellectual study, applied *hands-on* learning, and leadership as a pedagogical and curricular model, distinct within the Cal State system. (CFRs 2.5, 2.8, 2.9)

2. The Mechanical Engineering department is to be commended for developing a faculty with strong academic credentials. (CFR 3.6)

Applied Technology

3. CMA is to be commended for its world-class facilities, and in particular for the improvement of the Training Ship Golden Bear and simulation facilities. It is commended for the initiative of its faculty in seeking out external funding to develop these facilities, and for integrating them into the instructional experience. (CFR 4.2)

Leadership Development

4. CMA is to be commended for the many curricular and co-curricular opportunities for leadership at CMA, and that both license and non-license students are taking advantage of them to great benefit. (CFRs 1.5, 4.6)

Global Awareness

5. CMA is to be commended for its efforts to strengthen its global and international academic offerings and participatory cultural opportunities. (CFR 1.5)

Student Success

6. CMA is to be commended for its commitment to developing the Institution Wide Student Learning Outcomes needed by its graduates. (CFRs 2.2, 2.3)

7. CMA is to be commended for it high graduation rates and successful professional placement of its graduates in the Maritime industry. (CFR 2.2)

Sustainability of the Educational Effectiveness Focus

8. CMA is to be commended for its widespread understanding that leadership development must be clearly defined and that leadership development opportunities must be integrated. (CFRs 2.2, 4.6)

9. CMA is to be commended for recognizing the need for reliable and valid institutional, program, and course level data, and for beginning to create structures to ensure their availability. (CFRs 2.10, 4.2, 4.3)

Program Review

10. CMA is to be commended for updating its Academic Program Review process and for substantive advancement in the quality and depth of recent program review reports, as evidenced by the program reviews of the Global Studies and Maritime Affairs and Marine Transportation departments. (CFR 2.7)

Assessment Infrastructure

11. CMA is to be commended for beginning to build a comprehensive infrastructure for assessment by creating a plan for assessing the newly established Institution-Wide Student Learning Outcomes and forming the Institution-Wide Assessment Committee, and several other committees that include assessment as a primary focus. These initiatives show strong promise. (CFRs 2.3, 2.4, 2.10)

12. CMA is to be commended for the firm understanding and commitment to assessment shown by many faculty and staff members as evidenced by Program Learning Outcomes and program assessment plans as well as course related assessments. CFRs 2.3, 2.4)

13. CMA is to be commended for the recent successes of the ME and ET programs in its ABET programmatic accreditations. (CFR 4.3)

14. CMA is to be commended for its use of external national measures to provide direct evidence of student learning, such as professional licensing examinations, and the CLA, and evidence of student engagement such as NSSE and EBI. (CFR 4.3)

15. CMA is to be commended for the establishment of the registrar position and his initial efforts to create improved data collection and analysis systems. (CFRs 4.3, 4.5)

Diversity

16. CMA is to be commended for building institutional capacity around issues of diversity, as evidenced in the establishment of the Cal Maritime Unity Council (Unity and Diversity Committee), the additional web and marketing materials for the recruitment and retention of both female students and students of color, and the general understanding of the need for a more diverse community of students, faculty, and staff. (CFR 1.5)

CSU *Identity*

17. The review team commends CMA for progress in achieving the objectives in its master plan regarding enhanced self-image, enrollment growth, and academic mission. (CFRs 1.1, 1.2)

M.   Recommendations

Intellectual Learning

1. The review team recommends that faculty development and support should continue to enhance the understanding of and ability to engage in the scholarship of teaching, integration, discovery and application. (CFRs 2.8, 2.9, 3.6)

2. The review team recommends that staff development and support should help to identify and implement best practices in their respective administrative and service areas. (CFR 3.4)

Applied Technology

3. The review team recommends that CMA develops and implements an assessment system for applied technology that demonstrates the effect of these activities in achieving programmatic and institutional outcomes. (CFRs 4.2, 4.3)

Leadership Development

4. The review team recommends that Leadership Development opportunities must be integrated across campus. (CFR 3.6)

5. The review team recommends that CMA:

    a. Gathers in-depth information about the many available leadership opportunities via an institutional audit;

    b. Clearly describes a stable administrative, education and training structure whereupon campus-wide leadership components can be better integrated;

    c. Specifies the methods for assessing the impact of the leadership opportunities; and

    d. Creates a mechanism for using the assessment results to guide improvements.

Global Awareness

6. The review team recommends further refinement of the statement of Global Awareness SLOs and their assessment, and the utilization of assessment data for curricular and co-curricular program improvement. (CFR 1.5)

Student Success

7. The review team recommends that CMA prioritize the action items from the Delivery Plan for Improving Graduation Rates and develop measures for determining their relative effectiveness. (CFRs 2.10, 4.3)

8. The review team recommends that CMA strengthen it collection, processes and management of accurate and consistent enrollment, graduation and other necessary student data. (CFRs 4.3, 4.4, 4.5)

Sustainability of the Educational Effectiveness Focus

9. As one of CMA's core principles, the review team recommends that student leadership development opportunities continue to extend beyond the corps of cadets. (CFR 2.2)

10. The review team recommends that the sustainability of institutional assessment be systematically addressed. That is, campus-wide and programmatic student learning

outcomes assessment must be coordinated and integrated to gain maximum efficiency and effectiveness. (CFR 1.8)

Program Review

11. The review team recommends that CMA refines and sustains the program review process. (CFR 2.7)

Assessment Infrastructure

12. The review team recommends that a stronger link between assessment findings and program improvement be established and documented. (CFR 1.10)

13. The review team recommends that expectations for demonstrated student performance against each IWSLO need to be set, with targets and measures established. (CFR 1.2)

14. The review team recommends that student performance should be assessed where possible using direct measures and that performance should be compared to peer institutions. (CFRs 2.1, 2.4, 2.5)

15. The review team recommends that the assessment practices demonstrated in the programmatic accreditations be deliberately and systematically diffused across campus as best practices. (CFR 4.6)

16. The review team recommends that the IWAC include graduate programs in its portfolio of responsibilities. (CFRs 2.6, 3.8)

17. In summary, the review team recommends that the assessment efforts to date be sustained by the CMA leadership so that the institution may achieve exemplary status in the CSU system and its local region. (CFR 4.6)

18. The review team recommends that the IWAC work with the registrar to identify and integrate IWSLO data collection needs into the new data analytics suite. (CFR 4.5)

19. The review team recommends that data collection begin immediately to support all elements and IWSLOs in the IWAC five-year analysis plan. (CFR 4.5)

Diversity

20. The review team recommends that CMA conducts a comprehensive study of the factors that affect retention at CMA, disaggregated appropriately, and then acts on these findings to improve student retention and success. (CFR 1.5)

CSU Identity

21. The review team recommends that CMA pursue a unique status with the CSU Board of Trustees, allowing CMA to develop additional admission criteria that would ensure student awareness, academic preparation, and fit with CMA's mission. (CFRs 1.2,1.9)