



UNITED STATES MARINE CORPS
MARINE CORPS UNIVERSITY
EDUCATION COMMAND
2076 SOUTH STREET
QUANTICO, VA 22134

IN REPLY REFER TO:
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CG
17 Jan 20

MARINE CORPS UNIVERSITY INFORMATION TECHNOLOGY AND EDUCATIONAL
TECHNOLOGY MASTER PLAN

From: President, Marine Corps University/Commanding General, Education Command
To: Distribution List

Subj: MARINE CORPS UNIVERSITY INFORMATION TECHNOLOGY AND
EDUCATIONAL TECHNOLOGY MASTER PLAN

1. Situation. The Secretary of the Navy directed the Chief Learning Officer (CLO), in collaboration with the OPNAV N7 and DC CDI, to develop and deliver a comprehensive naval education strategy. The strategy will include a plan for integrated naval wargaming, competitive team learning, and continual learning for every Sailor and Marine, at every paygrade. In support of this effort, the Assistant Secretary of the Navy (Research, Development and Acquisition) is responsible for developing options to better unify the acquisition, design, development, as well as execution of all digital delivery systems that provide educational solutions to the Naval Educational Enterprise, to include a proactive conduit to the best technical sources of civilian and military massive open online courses, gamification, virtual reality, and e-learning. Additionally, the 38th Commandant of the Marine Corps (CMC) directed a change to the training and education continuum from an industrial age model to an information age model. An information age approach is one that is focused on active, student-centered learning using a problem-posing methodology where students are challenged with problems that they tackle as groups in order to learn by doing and also from each other. Also, CMC stressed the importance of professional wargaming in force design, education, and training. Information and education technology are critical enablers to these initiatives. The Information Technology (IT) and Education Technology (ET) (IT/ET) master plan supports faculty research, institutional effectiveness initiatives, the MCU strategic plan, and accreditation efforts.

a. Friendly Forces. The CLO for naval education reports directly to SECNAV and the UNSECNAV, and serves in a manner much like other staff assistants who lead portfolios critical to the future of the Department of the Navy (DON). The CLO acts as a DON advisor to the OPNAV and Marine Corps Staff on all educational matters, and will work with the OPNAV N7 and DC CDI to create a Naval University System, starting with the Naval Community College. The CLO acts as SECNAV's representative during the POM development process for education, formulates policies, strategies, and guidance, and serves as a strategic conduit to civilian academia and the private sector for the entire DON to ensure best practices are gleaned and shared equally.

Subj: MARINE CORPS UNIVERSITY INFORMATION TECHNOLOGY AND
EDUCATIONAL TECHNOLOGY MASTER PLAN

b. Assumptions

- (1) Sufficient funding will be available and programmed in accordance with this plan.
- (2) MCU will maintain appropriate authorities to operate.

2. Mission. From Fiscal Year 2020 (FY 20) through FY 26, MCU executes the IT/ET plan in order to maximize learning, research, collaboration, and data analytics opportunities for students, faculty, and staff.

3. Execution

a. Commander's Intent

(1) Purpose. IT/ET operations are in support of maximizing learning, research, collaboration, and data analytics opportunities for students, faculty, and staff.

(2) Method. The IT/ET Working Group (IT/ET WG) will anticipate changes to the environment in which our Marines operate and develop and implement plans to provide the educational and administrative tools to prepare our students, faculty, and staff for those rapid changes. The IT/ET WG will lead the strategic planning, organization, prioritization, investment, and decision-making activities in all areas of information technology and education technology throughout MCU. The IT/ET WG will make recommendations to campus leadership on strategic IT/ET issues, lead improvements in business processes, IT/ET systems and culture, and assess the effectiveness of IT/ET investments and services.

(3) Endstate. Information and education technologies systems that are up to date, meet industry standards, and fully support MCU's mission to develop and deliver Professional Military Education and training through resident and distance learning programs, while also preserving and presenting the history of the Marine Corps.

b. Concept of Operations. With a sense of urgency, the MCU Enterprise will anticipate, articulate, and respond to emerging educational requirements. To this end, MCU will acquire and implement cutting edge IT and ET based upon industry, DOD, and civilian university enterprise architecture best practices. Once acquired, MCU will improve the application of learning technology to enhance curricula, learning, research, assessment, and collaboration. MCU will leverage TECOM/MCU and external agency expertise and ET to develop and offer continuing education, training, and resources that will supplement formal PME and training programs. This plan will be executed in three phases. Audiovisual upgrades and a 25% tech refresh per year are continuous through all three phases. The IT/ET WG will meet regularly in accordance with the charter. President MCU will receive quarterly updates. In addition to quarterly updates, the President will receive event driven information or decision briefs for new initiatives, reallocation of funds in excess of \$100K, and at each stage of the Planning, Programming, Budgeting, and Execution process.

Subj: MARINE CORPS UNIVERSITY INFORMATION TECHNOLOGY AND
EDUCATIONAL TECHNOLOGY MASTER PLAN

(1) Phase 1 Near Term. This phase encompasses those actions that will take place during FY 20. They include expanding WiFi to the regional SNCO Academies (SNCOA), establishing the eLearning Ecosystem, pursue opportunities to increase collaboration and information sharing, initiating assessment software solution, establishing a SIPRNet capability in Warner Hall, upgrading audiovisual equipment in Geiger Hall and the Gray Research Center, and an initial wargaming capability.

(2) Phase 2 Mid Term. This phase encompasses those actions that will take place during FY 21. They include specialized SME support for .edu, replacement of legacy MarineNet, and procurement of a Master Learning Record System. Additionally, MCU will fully implement assessment software in support of institutional effectiveness.

(3) Phase 3 Long Term. This phase encompasses those actions that will take place during FY 22-26 (POM-22 FYDP). They include expanding .edu to the regional SNCOAs, transition to a software as a service model, ensure systems are compatible with the Naval University, establish a collaborative classified research capability, and digitize and make publicly available the History Division archives and the National Museum of the Marine Corps collection.

c. Tasks

(1) Vice President for Business Affairs

- (a) Provide oversight of IT operations.
- (b) Provide executive oversight for the IT/ET Working Group.
- (c) Develop IT/ET requirements.
- (d) Evaluate new technologies for inclusion in MCU's IT infrastructure and eLearning Ecosystem.

(2) Vice President for Distance Learning

- (a) Provide oversight of ET operations.
- (b) Provide executive oversight for the IT/ET Working Group.
- (c) Develop IT/ET requirements.
- (d) Evaluate new technologies for inclusion in MCU's IT infrastructure and eLearning Ecosystem.

(3) Vice President for Academic Affairs

- (a) Provide academic input to IT/ET planning and execution.

Subj: MARINE CORPS UNIVERSITY INFORMATION TECHNOLOGY AND
EDUCATIONAL TECHNOLOGY MASTER PLAN

- (b) Provide executive oversight for the IT/ET Working Group.
- (c) Provide representation on the IT/ET WG.
- (d) Develop IT/ET requirements.
- (e) Evaluate new technologies for inclusion in MCU's IT infrastructure and eLearning Ecosystem.

(4) Vice President for Operations and Plans

- (a) Provide representation on the IT/ET WG as required.
- (b) Develop IT/ET requirements.
- (c) Evaluate new technologies for inclusion in MCU's IT infrastructure and eLearning Ecosystem.

(5) Director, IT

- (a) Develop, maintain, and execute the IT implementation plan.
- (b) Evaluate new technologies for inclusion in the IT infrastructure.
- (c) Interact with industry and sister services on IT best practices.
- (d) Serve as co-chair of the IT/ET Working Group

(6) Director, Educational Technology

- (a) Develop, maintain, and execute the ET implementation plan.
- (b) Evaluate new technologies for inclusion in the eLearning Ecosystem.
- (c) Interact with industry and sister services on eLearning best practices.
- (d) Serve as co-chair of the IT/ET Working Group

(7) Directors for MCWAR, CSC, SAW, EWS, CEME, LLI, HD/GRC, and NMMC.

- (a) Provide representation on the IT/ET WG as required.
- (b) Develop IT/ET requirements.
- (c) Evaluate new technologies for inclusion in MCU's IT infrastructure and eLearning Ecosystem.

Subj: MARINE CORPS UNIVERSITY INFORMATION TECHNOLOGY AND
EDUCATIONAL TECHNOLOGY MASTER PLAN

d. Commander's Critical Information Requirements

(1) Significant changes to the implementation schedule.

(2) Significant resource deficiencies.

e. Coordinating Instructions. None.

4. Administration and Logistics

a. Personnel. TBD.

b. Logistics. TBD.

c. Funding. SECNAV has committed to funding eLearning Ecosystem, .edu refresh, assessments, and part of wargaming through FY26. Currently, this plan is fully funded.

5. Command and Signal

a. Command. This Order applicable to MCU/EDCOM.

b. Signal. This Order is effective date signed.

ACKNOWLEDGE RECEIPT



J. M. BARGERON
Brigadier General
Commanding

Annexes:

A-IT/ET Working Group Charter

B-IT Implementation Plan

C-eLearning Ecosystem Implementation Plan

D-Definitions TBP

IT/ET Working Group Charter

Purpose

The Information Technology & Education Technology working group (IT/ET WG) is the group that leads the strategic planning, organization, prioritization, investment, and decision-making activities in all areas of information technology & education technology throughout Marine Corps University (MCU).

Working Group Goals

The IT/ET WG will make recommendations to campus leadership on strategic IT/ET issues, lead improvements in business processes, IT/ET systems and culture, and assess the effectiveness of IT/ET investments and services.

Outcome

The process will be considered a success if:

- The IT/ET WG establishes clear, consensus-based recommendations on the best available technologies in support of MCU;
- The Stakeholders are engaged in a meaningful way in evaluating the proposed technologies and in reviewing and commenting on the IT/ET master plan and projects supporting the strategies determined by the university;
- Project decisions fit into the context of the 21st learning objectives identified and recognize and respect the unique technology needs to support this initiative;
- Any technology roll-out takes the least amount of time and makes the most effective use of limited IT/ET funding.
- Anticipates and effectively responds to emerging requirements.

Terms of membership

Members agree to volunteer for the duration of the IT/ET Working group or provides an alternate when the member cannot attend. The member or alternate must attend the working group to ensure that the AOR is represented.

Advisory Group Operating Guidelines

Convening of Meetings

- Meetings will be held at the time and place chosen by the IT/ET Working group in the course of their meetings.
- It is anticipated that there will be [INSERT NUMBER] meetings per FY
- The IT/ET Working group members will be informed of meetings through email or information portal, depending on his/her preference, at least two weeks prior to the meeting.

Communication

- Meetings will be advertised in the [LIST MEDIA AND/OR LOCATION].
- Project documents and notices will be posted on the collaboration website.
- Email: [CONVENER] should be copied on all correspondence, and if [CONVENER] chooses to open a dialogue via email, all IT/ET Working group members will be copied.

Draft 14 Jan 20
Charter to be reviewed and adopted by the IT/ET Working Group

Conduct of meetings

- Meetings will be open to all.
- Meetings will be facilitated.
- Informed alternates are acceptable and encouraged if the IT/ET Working group member cannot attend.
- All cell phones will be turned off during the meetings.
- After all meeting agenda items have been addressed, time will be provided for non members in attendance to voice their opinions.
- Meetings will end with a clear understanding of expectations and assignments for next steps.
- Meetings are expected to be one to two hours and not exceed two hours. Extension of time, in 15 minute increments, will require the consent of the majority of members attending that meeting. Consensus will be indicated with a show of hands.
- The consultant will keep a record of meeting attendees, key issues raised, and actions required. Comments from individual members will generally not be attributed and a verbatim record of the meeting will not be prepared.
- The previous meeting record and a meeting agenda will be forwarded to members of the IT/ET Working group at least one week before the next meeting. Any changes to the record of the past meetings shall be in writing and forwarded to the [CONVENER] prior to the next meeting.

Meeting Ground Rules

- Speak one at a time – refrain from interrupting others.
- Wait to be recognized by facilitator before speaking.
- Facilitator will call on people who have not yet spoken before calling on someone a second time for a given subject.
- Share the oxygen – ensure that all members who wish to have an opportunity to speak are afforded a chance to do so.
- Maintain a respectful stance toward towards all participants.
- Listen to other points of view and try to understand other interests.
- Share information openly, promptly, and respectfully.
- If requested to do so, hold questions to the end of each presentation.
- Make sure notes taken on newsprint are accurate.
- Remain flexible and open-minded, and actively participate in meetings.

Roles and Responsibilities

THE IT/ET Working group is an advisory group to [CONVENER]:

The IT/ET Working group members agree to:

- Provide specific local expertise, including identifying emerging local issues;
- Review project reports and comment promptly;
- Attend all meetings possible and prepare appropriately;
- Complete all necessary assignments prior to each meeting;
- Relay information to their constituents after each meeting and gather information/feedback from their constituents as practicable before each meeting;

Charter to be reviewed and adopted by the IT/ET Working Group

- Articulate and reflect the interests that advisory group members bring to the table;
- Maintain a focus on solutions that benefit the entire university;
- Present its recommendations for IT/ET technologies. The presentation would include subjects such as: IT/ET Purpose and Need Statement, technology recommendation, procurement strategies and technology phasing plans. The IT/ET Working group shall select from among its members a presenter or team of presenters.

[CONVENER] and the consultant team agree to:

- Provide the IT/ET Working group members the opportunity to collaborate with other agencies and groups on making recommendations for the IT/ET technologies;
- Effectively manage the scope, schedule and budget;
- Keep the IT/ET Working group informed of progress;
- Provide documentation to support recommendations;
- Provide technical expertise;
- Brief local decision makers and produce briefing materials and reports;
- Provide early notification of the IT/ET Working group meetings and provide ten working days to review and comment on technical reports and other documents;
- Conduct stake holder meetings necessary to inform and engage the university.
- Manage logistics for meetings; and
- Explain the reasons when deviations are taken from the IT/ET Working group recommendations.

Communication

The IT/ET Working group members will be informed of meetings through email or direct mail, depending on his/her preference, at least two weeks prior to the meeting.

- Meetings will be advertised in the [LIST MEDIA AND/OR LOCATION].
- Project documents and notices will be posted on the project website.
- Email: [CONVENER] should be copied on all correspondence, and if [CONVENER] chooses to open a dialogue via email, all IT/ET Working group members will be copied.

Consensus Building

The IT/ET Working group is primarily advisory. Members will strive to reach agreement by consensus at a level that indicates that all partners are willing to live with the proposed action. Partners will strive to work expeditiously and try to avoid revisiting agreements once made. If agreement cannot be reached on a particular issue, [CONVENER] will retain final decision-making authority.

Conflict Resolution

When an issue arises that cannot be easily resolved, the IT/ET Working group members agree to:

- Remember that controversial projects are unlikely to receive funding, so the intent of all parties is to resolve issues so the project can be funded.
- Determine if the issue should be resolved within or outside of the IT/ET Working group and participate however is appropriate.
- Ensure the appropriate decision makers are at the table to resolve the issue.

ANNEX B TO MARINE CORPS UNIVERSITY (MCU) INFORMATION TECHNOLOGY AND EDUCATIONAL TECHNOLOGY MASTER PLAN

Subj: INFORMATION TECHNOLOGY IMPLEMENTATION PLAN

1. Situation. As Marine Corps University’s (MCU) growth and educational mission has expanded, the university’s networks need to evolve to keep pace—especially, since its footprint has grown significantly, expanding from a one campus infrastructure to a global enterprise. MCU has come to increasingly rely on its network infrastructure to provide it with mission-critical services to support the research, collaboration and academic studies. Information Technology (IT) and Audio-Visual (AV) systems and capabilities within MCU facilities are critical for the learning environment supporting students and staff. These must be refreshed and maintained to prevent the erosion of capabilities.

2. Mission. The IT Directorate provides IT and AV systems support of MCU. The duties and responsibilities of the IT directorate include but are not limited to the following: procurement, design, administration, installation, management, web portal and content management, life-cycle replacement, cybersecurity and governance, and battle simulation based support. IT supports the implementation of emerging IT and computing solutions support to keep pace with emerging capabilities to include, but not limited to information technology hardware, software, applications, audio-visual and voice over IP solutions, projectors, computers and servers.

3. Execution

a. Concept of Operations. Figure 1 below lays out IT and AV system upgrades by Fiscal Year (FY). Priority will be assigned due to the significant impact it may have on the university as a whole.

IT and AV System Upgrade Schedule

	FY20	FY21	FY22	FY23	FY24	FY25
AV for .edu	\$1,000K	\$1,000K	\$0	\$1,000K	\$0	\$1,000K
Tech Refresh 25% per FY	\$863K	\$863K	\$863K	\$863K	\$863K	\$863K
Service Support at remote sites	\$750K	\$750K	\$1,200K	\$1,200K	\$1,650K	\$1,650K
Specialized SME Support for EDU		\$1,500K	\$1,500K	\$1,500K		
EDU network Expansion	\$615K/PMC	\$1,750K/OMMC \$863K/PMC*	\$750K/OMMC \$863K/PMC*	\$2,200K/OMMC \$863K/PMC*	\$1,650K/OMMC \$863K/PMC*	\$2,650K/OMMC \$863K/PMC*

* May be less

Figure 1

b. Tasks

AV Refresh

- AV maintenance support (equipment installed has no warranty contract sustainment, there is a need to update, patch and reprogram AV system controllers)
- Replace inoperable Mondo pads (Interactive Monitors through-out the university, primarily SNCOAs)
- Finish configurations of equipment already installed to provide additional capabilities
- Replace end of life equipment

WiFi and .edu expansion (CampusNet Wireless)

- Provide CampusNet wireless to the SNCOA while they wait for the programmed .edu expansion to be installed
- Update commercial circuits for SNCOA and CDET locations, provide commercial connectivity through one vendor covered under our ATO
- Extended the .edu wireless network to the MCU offsite facilities
- The Figure 2 below lays out the plan to extend WiFi to the SNCOAs.

Location	FY20	FY21	FY22	FY23	FY24
CLNC	Expand .edu to CDET \$36K				
CAMPEN	.edu \$6.796M				
29 Palms	CampusNET WiFi	CampusNET WiFi Cisco JELA	.edu \$2.303M		
Okinawa	CampusNET WiFi	CampusNET WiFi Cisco JELA	CampusNET WiFi Cisco JELA	.edu \$2.296M	
Hawaii	CampusNET WiFi	CampusNET WiFi CISCO JELA	CampusNET WiFi Cisco JELA	CampusNET WiFi Cisco JELA	.edu \$2.288M

The .edu expansion for the SNCOA is highlighted in green with programmed funding. The commercial WiFi is highlighted in yellow.

Figure 2

- Total Funding Requirement for commercial WiFi is contained in Figure 3 below.

FY20	FY21	FY22	FY23	FY24
\$615,970 (PMC) CDET asset	\$149,940 (OMMC)	\$149,940 (OMMC)	\$149,940 (OMMC)	\$149,940 (OMMC)

Figure 3

IT Refresh

- Provide Data Center and network infrastructure upgrades to support .edu expansion and COOP capabilities
- Update wireless coverage through-out MCU facilities
- Upgrade to support expanded VTC and VoIP capabilities

IT Support

- Provide touch labor support at the SNCOAs as the .edu expansion comes online at those facilities
- Support MCU IT COOP capabilities(Camp Johnson and Camp Pendleton)

Tasks supporting the identified information technology projects are the following:

- Provide overall planning and coordination for the IT implementation
- Provide appropriate training for personnel
- Provide all needed technical assistance
- Schedule any special computer processing required for the implementation
- Perform site surveys before implementation
- Ensure that all prerequisites have been fulfilled before the implementation date
- Provide personnel for the implementation team
- Acquire special hardware or software
- Prepare site facilities for implementation

There will be a need for modification of the MCU accreditation package in support of these IT implementations. Overall acceptance will be the IT directorate with the approval of the IT/ET WG.

4. Administration and Logistics

a. Administration. The IT Directorate is a sub-organization under the VPBA receives all administrative support through the EDCOM's Admin office.

b. Logistics

(1) Funding

	FY20	FY21	FY22	FY23	FY24	FY25
PMC .edu	\$ 6,796	\$ 637	\$ 2,303	\$ 2,296	\$ 2,288	\$ 2,322
TECH REFRESH	\$ 863	\$ 863	\$ 863	\$ 863	\$ 863	\$ 863
O&M .edu	\$ 94	\$ 763	\$ 1,125	\$ 1,161	\$ 1,197	\$1,220.94
AV	\$ 1,000	\$ 1,000	\$ -	\$ 1,000	\$ -	\$ 1,000
SERVICE SPT	\$ 750	\$ 750	\$ 1,200	\$ 1,200	\$ 1,650	\$ 1,650
.EDU TOTAL	\$ 9,503	\$ 4,013	\$ 5,491	\$ 6,520	\$ 5,998	\$ 7,056
BASIC IT	\$ 5,213	\$ 5,317	\$ 5,424	\$ 5,532	\$ 5,643	\$ 5,756
Total IT	\$ 14,716	\$ 9,330	\$ 10,915	\$ 12,052	\$ 11,641	\$ 12,812

(2) Contracting. In addition to contracting through the Regional Contracting Office, MCU will leverage contracting vehicles with the Naval Higher Education IT Consortium, Defense Logistics Agency, and others.

5. Command and Control

a. Command. The IT Directorate falls within the portfolio of the Vice President for Business Affairs and provides IT support to EDCOM and all of its enclaves, world-wide.

b. Control. Execution of these responsibilities are described below.

(1) Internal Communication and Interfaces.

- (a) EDCOM
- (b) IT/ET Working group
- (c) Executive Steering Committee

(2) External Communication and Interfaces. These relationships include:

- (a) HQMC (C4)
- (b) MARFORCYBER/MCCOG/MCB G6
- (c) TECOM BQ (G3, GS, G6, G8, MCTIMS)
- (d) TRNGCMD HQ (G3, GS, G8)
- (e) USMC Formal Schools
- (f) Defense Logistics Agency
- (g) MCSC/MCICOM Regional Contracting Office
- (h) Naval Information Warfare Center (NAVWAR)
- (i) Naval Higher Education Information Technology Consortium
- (j) OPM USA Learning
- (k) DoD Higher Education Consortium
- (l) DoD Chief Information Office
- (m) Naval Community College (NCC) IT Working Group
- (n) EDUCAUSE

ANNEX C TO MARINE CORPS UNIVERSITY (MCU) INFORMATION TECHNOLOGY AND EDUCATIONAL TECHNOLOGY MASTER PLAN

Subj: ELEARNING ECOSYTEM IMPLEMENTATION PLAN

1. Situation

a. Overview. The eLearning Ecosystem is an enterprise level, digitally-based system that supports the creation, distribution, tracking of digital training and education content for formal schools, PME, and communities of interest (COI). With the expansion of MarineNet into an eLearning ecosystem, digital content will no longer be considered Distance Learning, but rather Distributed Learning. The main distinction is that Distributed Learning means that content is created in a way that supports delivery to a learner with or without an instructor, at any time.

b. Background. College of Distance Education and Training (CDET) was established in October 2002 as a subordinate organization of Training and Education Command (TECOM) and tasked with supporting TECOM and its main subordinate commands digital development and delivery of training and education programs and products via Marine Corps Distance Learning Program, a level III IT program of record. CDET assumed the responsibility of service advocate for distance learning, representing the Marine Corps at the Department of Defense Advanced Distributed Learning Action team forums. During June 2013, CDET was reassigned from TECOM to EDCOM, but retained all of the same duties and responsibilities.

c. Ecosystem description. The eLearning Ecosystem is a system of systems where a single portal is used for authentication and access. The ecosystem is hosted in Amazon Web Services (AWS GovCloud) and has an active, approved Authority to Operate (ATO). The major components of the ecosystem are illustrated in Figure 1.

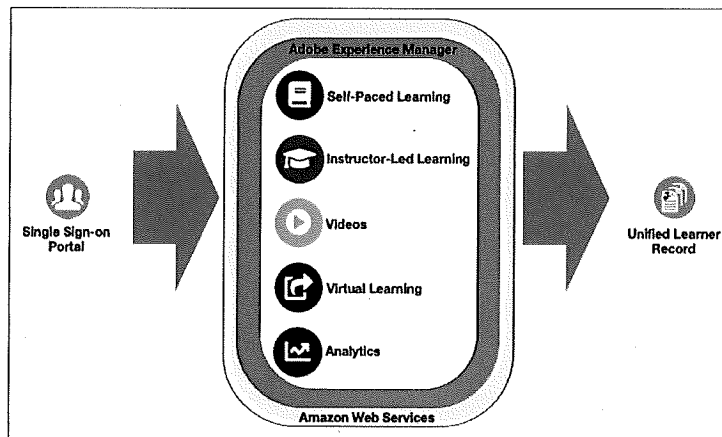


Figure 1. eLearning Ecosystem

(1) Self-Paced Learning. Self-paced learning will continue to be provided by legacy MarineNet until a suitable replacement can be found and piloted. Until that time, the look of MarineNet will be modified to look like the other applications of the ecosystem. Additionally, MarineNet will be modified to provide responsive, or automatic screen re-sizing capabilities, thus enhancing the access to learning content from a variety of mobile devices.

(2) Instructor-Led Learning. Instructor-led learning is accomplished via Moodle, a no cost, open-source Learning Platform adopted by K-12, higher education and sister services. Moodle can be easily integrated with other tools (extendable) such as Adobe Connect (a synchronous collaboration delivery tool). Moodle's customization features allow United States Marine Corps (USMC) schools and organizations the ability to manage their own instructor-driven learning space. Delivery of instructor led learning content can be accomplished synchronously or asynchronously, thus providing a robust distributed learning capability.

(3) Videos. MarineNet Video Services (MVS) allows for the upload and access to training and education videos that are accessible by all Marines and authorized civilians. MVS can be accessed on a learner's personal mobile device. There are currently over 60 organizational channels and that number is increasing due to the demand for video-based learning content.

(4) Virtual Learning. Virtual classrooms and meeting spaces will be accomplished with Adobe Connect, a video E-Learning collaboration tool. Connect allows for the recording of class sessions for later use, or if a student is unable to attend a virtual session in real time. Connect can be tightly integrated into Moodle so an instructor and student can easily join or leave a session. Connect also has the ability to advertise and host a live streaming event (Naval Safety Center leverages this capability for its annual symposium).

(5) Analytics. Most tools within the Ecosystem have a certain degree of analytic data. The ultimate goal of Ecosystem analytics is to provide a one-stop-shop for data analysis.

(6) Learner Records Store (LRS). A future mid-term component of the ecosystem is the integration of a LRS designed to capture a students' performance in all training and education activities throughout their career, and catalog it in a Marine's Master Learning Record.

2. Mission. The Educational Technology (ET) Department, CDET designs, maintains, and resources the TECOM eLearning Ecosystem in order to provide TECOM and its major subordinate commands (MSC) with an enterprise- wide eLearning environment that supports the creation, distribution and tracking of digital content, documents and assesses student performance.

3. Concept of Operations. The development of the eLearning Ecosystem is a phased evolution in order to ensure best of breed learning technologies are selected and integrated, while maintaining the appropriate security posture. The near-term and mid-term phases are illustrated in Figure 2.

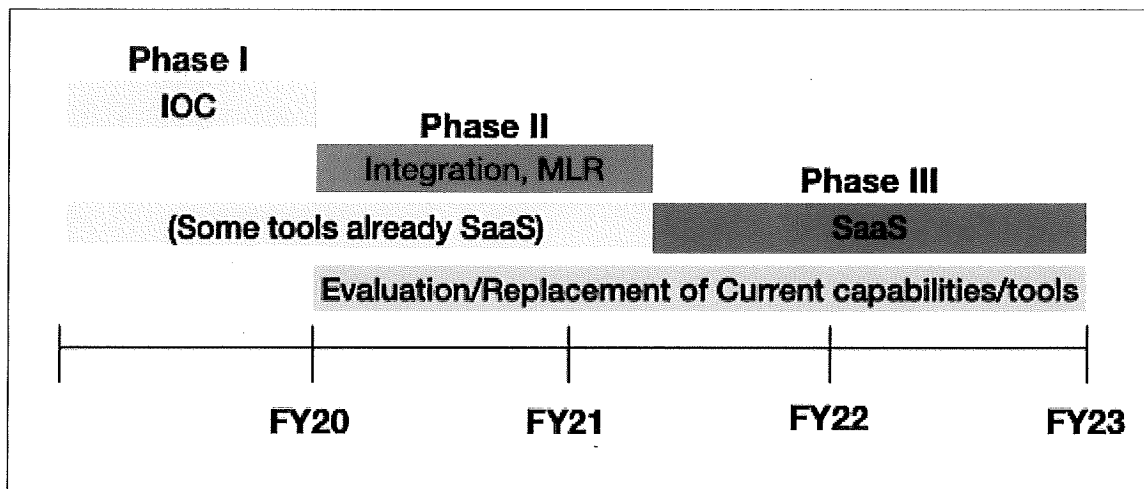


Figure 2. Development Phases

(1) Phase 1. The first phase consists of establishing the initial capabilities of the eLearning Ecosystem and providing training to learners as well as staff on system capabilities. The rollout of the ecosystem portal is scheduled for late February 2020. Initially, "quick -start" guides will be made available. The ET Department will plan and coordinate a virtual event that will discuss how to use ecosystem tools as well as how to develop learning content for online delivery. Phase 1 will be complete with an Initial Operating Capability (IOC), currently scheduled for late February, 2020.

(2) Phase 2. The main goal of this phase is to ensure the eLearning Ecosystem is integrated such that learners can access the learning content when and where it is needed. Additionally, the procurement and integration of a LRS will be the focus of ecosystem development. The LRS will gather learner data from each application that makes up the ecosystem and feed a Master Learner Record (MLR), which will capture all learning experience of system users. Records from the MLR can be synchronized with other systems such as Marine Corps Training Information Management System (MCTIMS) and Marine Corps Total Forces System (MCTFS). The creation of the MLR will also position the USMC to report learner data to the Naval University system and Office of Personnel Management (OPM). The completion of Phase 2 is projected for the end of fiscal year 2021.

(3) Phase 3. Phase 3 will focus on moving self-hosted applications of the ecosystem to a software as a service (SaaS) model. The SaaS model will allow CDET to maintain control over student records and data while application vendors/SMEs run their associated products. It is projected that the USMC will realize a cost savings or avoidance by leveraging this model. This phase is projected to be completed during fiscal year 2023.

(4) Subsequent Phases. Due to the evolving nature of educational technologies, the eLearning Ecosystem will need to be evaluated/re-evaluated continuously to ensure applications are meeting Marine Corps requirements. As new applications and/or requirements emerge, it is critical that stakeholders such as Education Command (EDCOM), Training Command (TRNGCMD) and TECOM provide continuous input into system capability requirements via the standing I/ET Working Group.

4. Administration and Logistics

a. Administration. The ET Department is organic to the CDET and receives all administrative support through the CDET Admin office.

b. Logistics

(1) Access

(a) Learning Resource Centers (LRCs). LRCs are computer centers located at most Marine Corps and some sister service bases and stations that provide Marines access to eLearning courseware required to complete annual training, MOS training and PME that is hosted on MarineNet. LRCs typically provide 20 Marine Corps Enterprise Network (MCEN) computers and a Facilitator. Facilitators are full time contract personnel that manage the LRCs and assist students with online training and proctoring of examinations. The CDET contracts for and provides Contracting Officer Representative duties for all 40 of the LRCs across the Marine Corps.

(b) Student/Learners can access MarineNet through any computer with internet connectivity and proper authentication.

(2) Funding

(a) O&M and PMC funding for the ET Department is provided through the Marine Corps Distance Learning Program, MCPC 460798, an Acquisition Category level III (ACAT III) IT program of record. PMC funding is obligated through our Acquisition Partners at MCSC PM Apps.

(b) The Marine System (eLearning Ecosystem) has been designated as a Defense Business System (DBS) Category II (BCAT II) which requires funding to be certified through the HR portfolio Functional Area Manager (FAM) and certified at the Chief Management Officer of the Navy.

(3) Contracting

(a) Four main contracting efforts support the ET Department.

(b) NAVAIR – Support Internal Development, Maintenance, Integration and Operations of the System.

(c) MCSC PM Apps – Support for the Documentation of Capabilities, System Requirements, Security and Configuration control.

(d) OPM USA Learning – SaaS technology solutions and emerging technologies that can be integrated into the E-Learning Ecosystem as a part of continuous development and support for the 40 Learning Resource Centers.

(e) MCSC OSS – Contractor support for operations and higher-level Student Support operations (help desk, Registrar, marketing and Educational Technologists) at Quantico VA.

4. Command and Control

a. Command. The ET Department falls within the portfolio of the Vice President for Distance Learning/Director, CDET and provides organic ET support to EDCOM. However, CDET and the ET Department also has direct and general support responsibilities to TECOM and all its MSCs.

b. Control. Execution of these additional responsibilities that cut across TECOM and its MSCs are described below.

(1) Internal Communication and Interfaces. The eLearning Ecosystem provides support for EDCOM and its associated schools, faculty, and staff. To ensure proper support, the Director of ET will co-chair the IT/ET Working Group to identify, budget for, de-conflict, and meet EDCOM requirements in accordance with the reference. Additionally, the Director of ET will address requests for support from Vice Presidents or School Directors, and other MCU Directorates as they relate to educational technologies.

(2) External Communication and Interfaces. CDET maintains direct and general support relationships with several organizations for learning technology, and support in the areas of advice/"best practices" and training. These relationships include:

- (a) HQMC (P&R, I&L, Safety)
- (b) M&RA (MCTFS)
- (c) TECOM BQ (G3, GS, G6, G8, MCTIMS)
- (d) TRNGCMD HQ (G3, GS, G8)
- (e) USMC Formal Schools
- (f) Defense Advanced Distributed Learning Advisory Committee (DADLAC)
- (g) MCSC (PM Apps, OSS,)
- (h) NAVAIR
- (i) OPM USA Learning
- (j) DMDC
- (k) DCPDS
- (l) Naval Community College (NCC) IT Working Group