



CENTERPRISE EXPAND LEARN TO SUPPORT WORLD CLASS TRAINING AT SCALE

LEARN is MOD's largest single training network.

LEARN (Local Education And Resource Network) is MOD's largest single training network Royal Navy, Army and Royal Air Force (RAF) technical training and education is delivered by the Defence College of Technical Training (DCTT) to around 20,000 trainees per annum through four Defence schools focused on the specialisations of engineering, communications and information systems.



Located across six sites, the schools deliver Royal Navy training at HMS SULTAN in Gosport, Army and Royal Marine training at MOD Lyneham and Blandford Garrison, and RAF training at RAF Cosford, MOD St Athan and RAF Digby.

DCTT provides initial trade training to service personnel entering the Armed Forces in the engineering trades and delivers development training to qualified engineers throughout their careers.

The right technology

Given the schools' focus, there is a continued commitment to ensuring that all learners - regardless of their duration of service - have access to the best-in-class digital tools and resources to support their learning.

Wing Commander Gary Watkins of DCTT picks up the story: "Five years ago, the MOD's original plan was to centralise all DCTT sites at MOD Lyneham. After those plans were shelved, it became a case of how to modernise the digital and communications services across those 6 sites.

"At this time, I was fortunate to have just finished working with Centerprise Group, encompassing Centiant International, on delivering my first Local Education And Resource Network (LEARN) project at MOD Lyneham.

"The original vision for LEARN was to design an integrated learning environment that could deliver a world-class standards-based approach to staff and students whomever and wherever they were while respecting the individual needs of each learner. We also needed to ensure the system was able to securely store and enable access control to information classified up to, and including, OFFICIAL SENSITIVE.

"We were able to deliver on this vision at MOD Lyneham, so naturally it made sense to see how the system architecture could be developed to work across different sites. We worked with Centerprise to combine two crucial elements into a single joined-up system design.

“Firstly, common services such as a virtual learning platform, and Microsoft Office that were required for all staff and students would be available to all sites through the Defence Educational Assured Network (DEAN): a scalable cloud platform.

“Secondly, LEARN puddles would be deployed locally at each site - blending the networking, connectivity, devices and domain-specific software that would be required to deliver high-quality learning appropriate for the differing needs of Royal Navy, Army and RAF technical training.

Having started five years ago as an individual DCTT innovation at MOD Lyneham, the LEARN platform has since gone on to meet the diverse needs of tens of thousands of students across a wide range of different sites and schools both for the DCTT and increasingly across the wider MoD network.

LEARN is currently deployed at MOD St Athan, RAF Cranwell, RAF Cosford, and MOD Lyneham. Other sites that will be live in the near future include Blandford, RAF Digby and the Defence Medical Academy - with a number of other MOD sites penned for completion next fiscal year.

Getting site-specific

While common systems and standards are important to the ability of the LEARN platform to deploy to new sites in a secure, timely and cost-effective manner, there are often varying needs for different learners across the armed forces.

LEARN puddles and access devices are managed locally and the LEARN solutions delivered at Lyneham, Cosford, or anywhere else operate on the same high-level design while remaining responsive to business needs both today and in the future.

Gary explains: “The footprint of LEARN is site-specific and delivers 75% the IT needed at the school out of the box, with the other 25% tailored to meet the school’s specific requirements.

“Individual sites take ownership of their local infrastructure, as the system has been designed to facilitate their business requirements for digital learning. With such services, any issues can be resolved locally without the need to call on central services or support - helping to improve productivity and maintain agility.

“Moving common services away from the local platform and into the DEAN cloud has enabled significant cost savings to be made, has coherency built-in, and gives the business the reassurance of a proven collection of tools and resources.”

This kind of flexibility in how LEARN is applied across the MOD means that innovative, future-facing requirements can be met with open arms. The infrastructure, devices and software required to power 3D learning, virtual reality and simulation are fully supported at site level with no compromises needed.

A standards-based approach

Within the MOD, there are hundreds of versions of each training process across each Service, Command and Unit - and potentially even within the same squadron. With LEARN, the MOD is able to deliver a single source of truth - meaning management can consistently assess against the same standards and ensure the quality of service for all.



Anytime, anywhere access

A recent improvement to LEARN is the utilisation of the Defence Digital Secure Managed Interface service, which allows users to connect securely to the MOD core network - the RLI.

Gary expands: "A LEARN device can access the RLI service needed for technical training, JAMES, Goldesp, TAFMIS, and TDOL, as well as our HR systems JPA and HRMS.

"Following the recent completion of development work with Defence Digital (formerly ISS), we can now also access MOD Office 365 SharePoint services including email services via Outlook Web Application."



A forward-facing approach

With over 500,000 individual sessions on LEARN every month and 1000 users per day accessing the VPN service to work from home - attention is now turning to continuing the same commitment to innovation that has seen the system go from strength to strength.

Gary comments: "We are now spending more time on user experience - speaking to service users and using the analytics and dashboarding capabilities built into the platform to continually make it more user friendly.

Ultimately, this means looking at the system in layman's terms, from a non-training perspective, and getting the interfaces smoother. This even involves pondering how we make the VDI access protocol to be more user friendly and what is missing from LEARN to make it even better."

An increasing use of Skype for Business and overlay integration for content delivered through SMART boards are two further examples of how the software on LEARN is being continually adapted to enrich the learning of all students.

The right intelligence

In addition to the significant savings delivered to date, LEARN is helping to facilitate information that helps course leaders and officers make more informed decisions about student engagement.

"If we look at the information that is available within the DEAN services, it gives schools and colleges insight about what should be taught, by whom and what additional resources might be needed," Gary adds.

"The VLE gives us extremely granular information about what was taught and the results achieved, while RLI services like TAFMIS give access to historical data. As we move forward we are looking to combine these into a coherent system and provide a system agnostic view of training that not only evaluates the successes of the past, but helps to influence the future direction of MOD training provision."

A true partnership

Centerprise's strategic role in the continued success of LEARN across MOD has not gone unnoticed by Gary:

"In addition to supporting the design and deployment of LEARN at the local level, consulting on infrastructure design and installation, and support in federating services up into DEAN,

Centerprise provide 1st line support for some key LEARN workloads that help keep system availability at the top of the agenda. They also provide peace of mind with 2nd line support across the entire system.

“Centerprise is one of our strategic partners. This is not about a contract, we collaborate as a team on strategic ideas to make sure that we are never standstill. Their team are professional, knowledgeable and helpful, and they are proactive and dependable in support of our new innovations - whether that be VLE development, anti-plagiarism, new splash pages, or enabling the look and feel of LEARN to be tailored to individual schools or sites.

Gary concludes: “Centerprise help to keep MOD learning evergreen - ensuring that our technology can keep up with the innovation and ambition shown by this great institution”

What is LEARN?

Local Education And Resource Network (LEARN) is the local ICT infrastructure that enables access to a coherent, modern learning environment and associated services. It gives students and staff secure access anytime, anywhere, to the software and resources they need to undertake successful training.

LEARN is a flexible, integrated IT solution, accredited to process information up to OFFICIAL SENSITIVE, that's perfect for the varying demands of MOD Training and Education. It has two main parts to its design:

LEARN: individual ‘puddles’ that operate at the site, or school level. They consist of a high capacity, high bandwidth, local infrastructure that includes networking and connectivity suitable for the common needs of all military personnel. More specialist needs, such as high-end devices or domain-specific software are also fully supported.

DEAN: a collection of common, centrally-funded services available to all LEARN puddles - delivered securely to devices via the cloud.

Summary Solution

Network

- Resilient High Capacity Network Architecture
- WiFi Access across Technical and Domestic
- Accommodation
- Direct Internet Connection

Virtual Learning Environment

- OFFICIAL training material
- OFFICIAL SENSITIVE training material
- Training material development
- Assessments & exams

Online Services

- LEARN Email and Skype for Business Servers
- Local Interactive Virtual Environments
- Virtual Classrooms
- Virtual Desktop Infrastructure
- Office Automation
- Office, Skype for Business
- Email
- SharePoint
- Adesoft Scheduling

Remote Access to Internal Systems

- Training management system (TAFMIS)
- Restricted LAN Interconnect (RLI) services
- HR Management System (HRMS and JPA)
- Defence Intranet
- MOD O365
- Inventory system(MJDI)