LEARNING MANAGEMENT, AND DIGITAL LEARNING ENVIRONMENTS

LEADING LIGHTS VIEW ON LEARNING MANAGEMENT SYSTEMS

> A Learning Management System (LMS) is a software application for the administration, documentation, tracking, reporting and delivery of education courses.

What does an LMS do?

- Teacher provision and sequencing of content, including custom playlists
- Management of assignments and assessments
- Marking and reporting
- Discussion and collaboration
- Pastoral records with internal and external messaging

Current views are that LMSes have been "highly successful in enabling the administration of learning but less so in enabling learning itself" (Brown, Dehoney & Millichap, 2015). Because the LMS is "anchored in semester-based sections of instructor-led courses, anything resembling an innovation is largely 'bolted on' rather than transformational" (Long & Mott, 2017).

What is post-LMS?

Next Generation Digital Learning Environments (NGDLE) combine a networked learning environment and an adaptive learning model enabled by advances in technology, machine learning, AI, and learning science. The potential of the NGDLE is to augment and enhance learning by connecting learners with instructors and peers meaningfully to enable, accelerate, and support learning. Its transformational impact will come through networked learning and smart pathways accelerated with timely, pinpointed interventions and nudges that augment teacher facilitation.
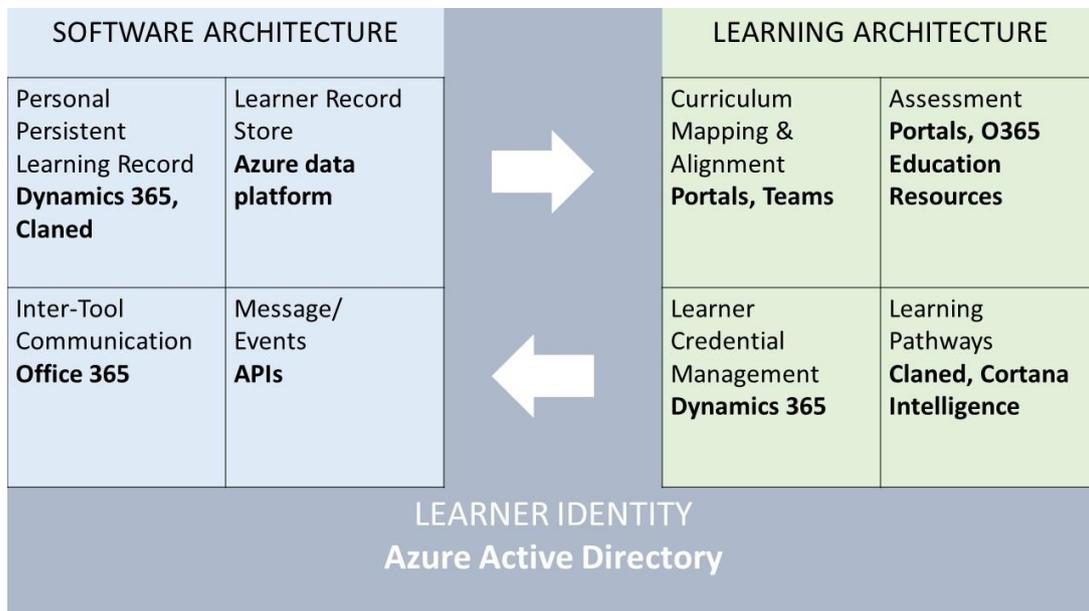
How does LEADing Lights provide a Digital Learning Environment?

LEADing Lights integrates purpose-built learning tools in O365, Claned, portals, Dynamics 365, and advanced analytics to serve learning and an adaptive education system (Goss, 2017).

- Teacher provisioning of content,
  - *including personalized pathways with analytics*
  - Teams classes, Claned
- Management of assignments and assessments,

- o *building from rich standards-aligned education resources and assessment and learning tools designed for a range of learning needs, enabling student ownership and portability of work year to year and school to school, and parent viewing*
  - o Teams with Class Notebook, Claned, Forms
- Marking and reporting,
  - o *informed by longitudinal student and cohort performance*
  - o Teacher portal, Power BI
- Discussion and collaboration,
  - o *with monitoring, safety, security, no external use of data*
  - o O365, Claned
- Pastoral records with internal and external messaging,
  - o *plus summary displays and trends*
  - o Portals, Dynamics, Power BI, Cortana Intelligence
- AND predictive analytics to help teachers and leaders see early learning trends supported by recommendations to students, teachers, leaders and families
  - o Dynamics, data platform, portals

NGDLE Components and the LEADing Lights platform

SOFTWARE ARCHITECTURE			LEARNING ARCHITECTURE	
Personal Persistent Learning Record **Dynamics 365, Claned**	Learner Record Store **Azure data platform**		Curriculum Mapping & Alignment **Portals, Teams**	Assessment **Portals, O365 Education Resources**
Inter-Tool Communication **Office 365**	Message/ Events **APIs**		Learner Credential Management **Dynamics 365**	Learning Pathways **Claned, Cortana Intelligence**
LEARNER IDENTITY **Azure Active Directory**				

Sources

Malcolm B., Joanne D., and Nancy M. (2015). The Next Generation Digital Learning Environment: A Report on Research, an EDUCAUSE Learning Initiative (ELI) white paper 2. https://library.educause.edu/resources/2015/4/the-next-generation-digital-learning-environment-a-report-on-research

Goss, P. (2017). Towards an adaptive education system in Australia. Grattan Institute. https://grattan.edu.au/report/towards-an-adaptive-education-system-in-australia/

Long, P. & Mott, J (2017). The N2GDLE Vision: The "Next" Next Generation Digital Learning Environment. Educause Review. https://er.educause.edu/articles/2017/7/the-n2gdle-vision-the-next-next-generation-digital-learning-environment