


Utilizing a learning management system to support anesthesiology education: Recommendations and best practices

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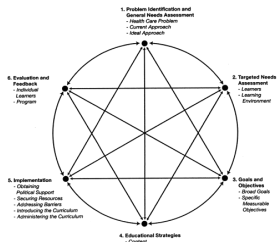
Learning objectives

- At the end of this session, participants will be able to:
 - List possible uses for a learning management system (LMS) to support anesthesiology education
 - Describe best practices for implementing a LMS in an anesthesiology department

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Six-step approach to curriculum development

1. Problem identification and general needs assessment
2. Targeted needs assessment
3. Goals and objectives
4. Educational strategies
5. Implementation
6. Evaluation and feedback



(Thomas et al, 2016)

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What is an LMS?




“Comprehensive, integrated software that supports the development, delivery, assessment, and administration of courses in traditional face-to-face, blended, or online learning environments”

(Wright et al, 2014)


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Needs assessment

-  **Wanted a Duke-supported and/or low-cost tool**
-  **Needed easy to use options for faculty and learners**
-  **Needed an interactive platform that could be used for various levels of learners**

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Implementation

- Created Sakai sandboxes (educator + faculty pilot user)
- Established partnership with Duke Learning Innovations (DLI)
- Agreed on pilot projects and timelines
- Established project teams
 - Education specialist
 - DLI instructional technology staff
 - Fellowship program coordinators
 - Faculty education leaders

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Projects to date

- Medical student education
 - ANES 440-C (Clinical Anesthesiology)
- Fellowship education
 - ACTA
- Continuing education
 - Morpheus Perioperative online programs
- Faculty development

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E-learning examples

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Projects in progress

- Medical student education
 - CTICU rotation
- Fellowship education
 - TEE training
 - Critical care fellowship
- Scoping continuing education project focused on nutrition

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Recommendations and best practices

- Develop curriculum first, then determine opportunities for online instruction
- Let learning needs, not technology, drive the process
- Examine existing resources at your institution, partnering when necessary
- Identify faculty who are interested in learning new skills or innovative instructional methods

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Recommendations and best practices

- Identify areas that might benefit from online education resources
 - High priority topics and/or programs
 - Areas that would benefit from additional organization and/or structure
 - Areas where your institution or program shines
- Utilize LMS to reduce administrative burden
- Involve coordinators in trainings and consultations with learning technology staff
 - Great way to learn new skills!

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References

- Thomas, P. A., Kern, D. E., Hughes, M. T., & Chen, B. Y. (Eds.). (2016). Curriculum development for medical education: A six-step approach. JHU Press
- Wright, C. R., Lopes, V., Montgomerie, C., Reju, S., & Scholler, S. (2014, April 21). *Selecting a Learning Management System: Advice from an Academic Perspective*. EDUCAUSE. <https://er.educause.edu/articles/2014/4/selecting-a-learning-management-system-advice-from-an-academic-perspective>

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