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Developing Interactive Curricular Elements with Teams of Faculty, Staff and Students

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objectives

1. Describe the resultant network structure and composition of faculty, students and staff involved.
2. Identify a step-by-step timeline of how the e-Learning modules went from a sketch and brainstormed idea to a tangible and useful product and the important role of instructional designers and an interprofessional peer faculty team.
3. Demonstrate exemplars.

Acknowledgements for funding

- Office of the Vice Chancellor of Academic Affairs
- College of Allied Health Professions
- Division of Physical Therapy Education

What was the resultant network of faculty, students and staff who participated?

Network of developers

- 325 faculty/staff + students/residents
- 2013 - present

Network of developers

- PT = 31
- (8 faculty, 23 students)
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9 Colleges & 5 “other” network of developers

Network of developers

Shape size = modules

Network of developers

2

How did the e-Learning modules go from a sketch to a module? What are the roles of instructional designers?

Paradigm for Change

Enable Mastery Learning via:
- Flipped classrooms
- Creation of just-in-time interactive e-learning modules available to all students
- Classrooms more for small group interactive sessions

Outmoded Education System

1940

Today

What is an E-module?
- A 10- to 15-minute interactive online multimedia module targeting one or two major learning objectives
- Multimedia components include:
  - Video
  - Audio
  - Gamification
  - Quiz with instant assessment
  - Some PowerPoint

Paradigm for Change

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Paradigm for Change

- Strong focus on student engagement and inclusion
- Strong institutional support – use of small funded RFAs of cohorts to incentivize participation
- Public showcase and recognition ceremonies
- Educational Research and Scholarship

E-Learning: Making a Difference

E-Gallery

unmc.edu/egallery

Access e-modules anytime, anywhere
Available to all UNMC faculty, staff, and students

Students as Curriculum Developers

E-Learning Studio
- Instructional design and technology support
- E-Learning authoring tools
- Scorecard and checklist

Students as Curriculum Developers

- Six month timeline
- Milestone meetings
- Peer review and testing
- Showcase and recognition

Demonstration of exemplars

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Student Perceptions of Modules

- amount of interactivity appropriate
- want access beyond semester
- helped me learn
- recommended using in the future

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What was the first-time lab practical pass rate for students WITH & WITHOUT modules by Joint Group

- Upper Extremity
  - With Modules: 100%
  - Without Modules: 90%
- Lower Extremity
  - With Modules: 91%
  - Without Modules: 78%
- Spine
  - With Modules: 89%
  - Without Modules: 67%
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Joint Exam     Cardio-pulm     Survey-patient room in acute care     Review an EMR     ICF: Case based

Why?
Challenging Content

Use in Course
• "Required" Pre-Class Activity
• Case Study application in class
• Study Resource

Outcomes

https://hmi.unmc.edu/Play/11555

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Why did I choose an e-learning module?

- "There is no more difficult art to acquire than the art of observation."
  - William Osler

Planned Use

1. Introduce Module
2. Practice in Lab
3. Hospital Simulation
4. VidiGrid link for Demo

Guided exploration of the CMR for therapists:
Cardiovascular and Pulmonary Conditions

Joint Exam, Cardio-pulm, Survey-patient room in acute care, Review an EMR, ICF: Case based

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Why?

Planned Use in Course
- "Required" Pre-Class Activity
- Case Study application in class
- Study Resource

Clinical Reasoning Activity Using the Classification of Functioning (ICF)

Purposes of e-Learning module
- To introduce students to the concepts and terminology of the ICF
- To provide examples of how the ICF can be used to make clinical decisions
- To provide opportunities to practice making some low complexity clinical decisions
- To prepare first-year PT students for a group discussion clinical reasoning case

Planned Use in DPT Curriculum

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References


