

# The Story Writes Itself: Using Narrative Learning to Enhance Medical Informatics Sessions

Sa'ad Laws, MA, MLIS, Paul Mussleman, MLIS, Mohamud A. Verjee, MBChB, FCFP, Jeremy Walker, MLIS  
Weill Cornell Medicine- Qatar, Doha, Qatar

## What is Narrative-Centered Learning?

In many instances, stories or narratives are often viewed as entertainment or as a casual pastime. However, when stories are applied to instructional contexts they have the ability to motivate, function as instructional scaffolding, and enhance problem-solving skills.

Narrative-centered learning environments are described as a combination of "story contexts and pedagogical support strategies to deliver effective, engaging educational experiences" (1). Another strength of utilizing narratives within instruction are their ability to contextualize otherwise discrete bits of information within a cohesive and enjoyable structure (2).

### Goals of Narrative-Centered Learning

1  
Motivation

Stories work as excellent sources of intrinsic motivation by contextualizing learning. When learning is presented in a contextualized, personalized way, the learner is able to connect with new knowledge, sustain effort for longer periods of instructional time, and also develop a sense of authority over their learning (3).

2  
Connections

Stories support our ability to build natural connections between discrete bits of information. When learners engage with contextualized stories, they are able to connect between multiple in-story elements as well as prior knowledge. These connections are supported and facilitated through sound instructional methods (3).

3  
Problem-Solving

Stories aid in problem-solving skills by presenting a diverse range of complex problems, as well as, "ambiguous goals, multiple routes and numerous interrelated factors" (3). As learners face challenging problems within interactive stories, they must seek ways to obtain suitable information that will address gaps and allow them to progress.

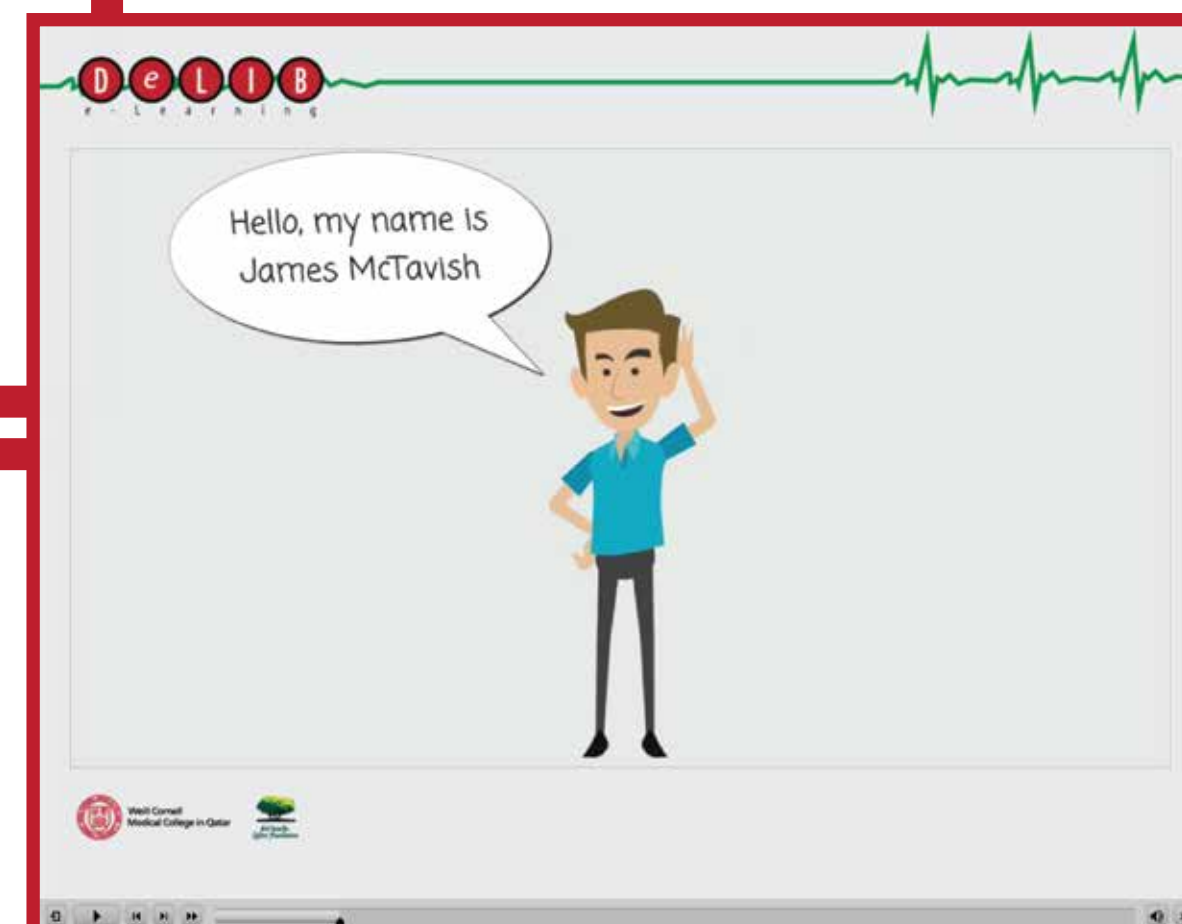
## What Did We Do?

At the start of each rotation, librarians were asked to introduce third-year primary care clerkship students to advanced resources that would assist them as they progressed through clinical training. Original renditions of these sessions were very passive and instructor-centered. As a result, students appeared unmotivated and uninterested in the critical resources and information being presented.

To remedy this, librarians and the clerkship director proposed implementing a narrative-centered learning environment that could be used as an in-class informatics session. Students would be presented with a clinical case, via an interactive story, that they would need to work through. At several points throughout the exercise, students would be prompted to identify and utilize biomedical resources that would aid them in progressing and understanding the clinical case.

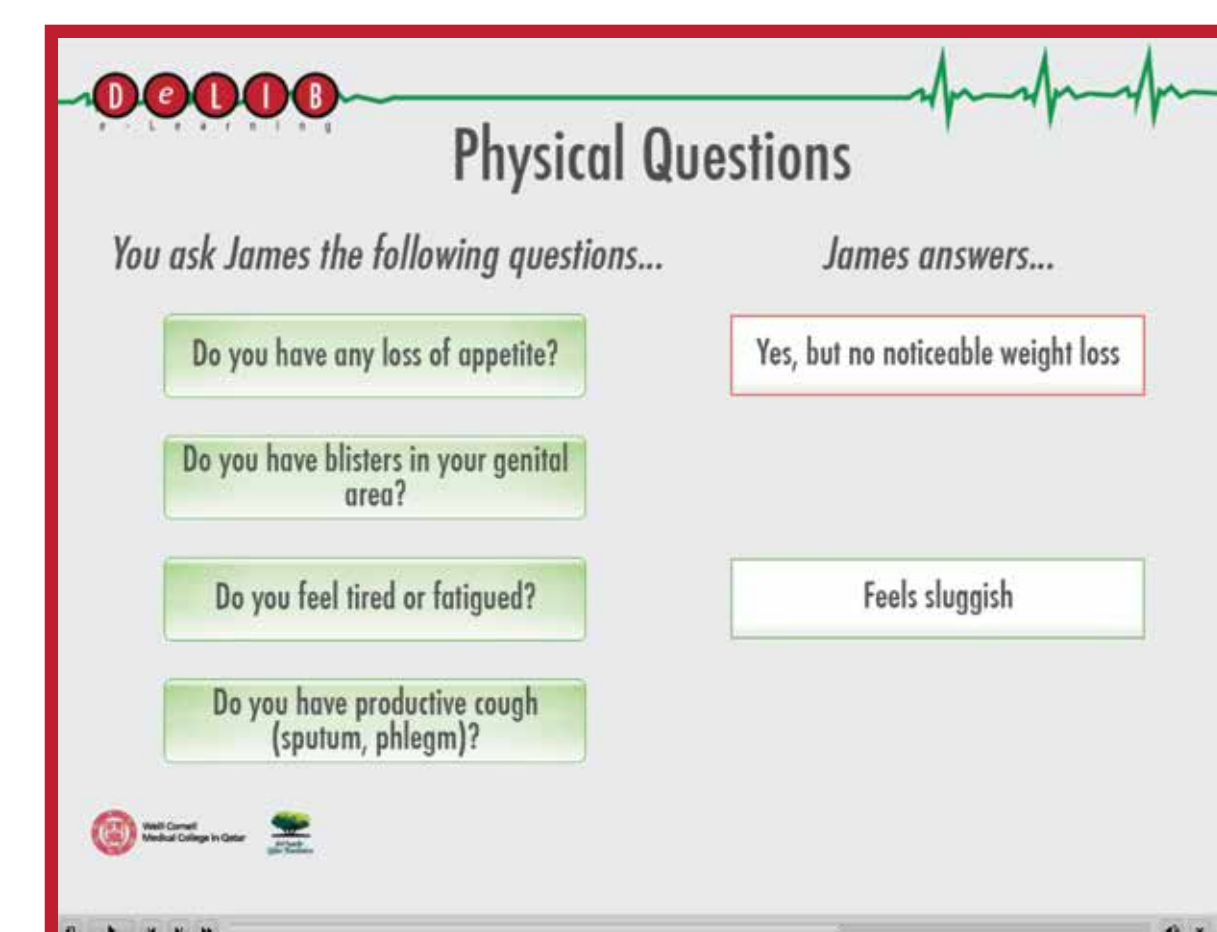


## How Did We Do It?



Using the ADDIE instructional design methodology, librarians began by gathering information and data about the session and students that would inform the design and instructional process. Librarians then set about developing instructional objectives and methods. With this information in hand, librarians and the clerkship director were able to develop a clinical case narrative that allowed for both clinical rigor and significant inclusion of bio-medical information resources. To present instruction within an interactive

format, librarians began by storyboarding the sequential points of the module, and then used Adobe Captivate to build an interactive module that would be used in class. During instruction, librarians and the clerkship director assisted students through the module, providing assistance with resources, facilitating diagnostic debate, and presenting socratic styled questions to stimulate metacognition and reflection. Finally, librarians created a summative assessment survey that students submitted after completion of the module.

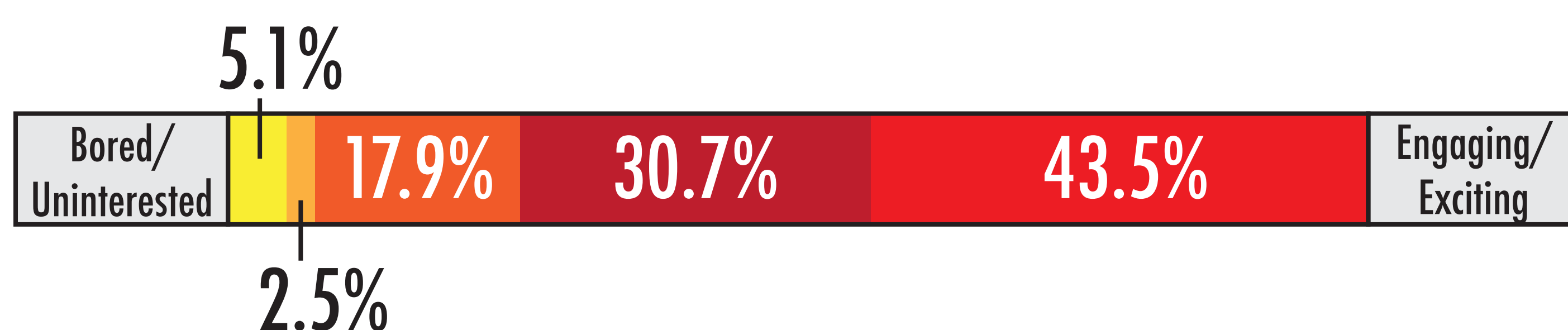


## What Are The Results?

Q: "Has the module added to your knowledge of the subject?"



Q: "During the eLearning teaching module, how did you perceive your learning experience?"



Q: "What was the most important thing you learned?"

**72.2%**

Percentage of students who identified resources as the most important thing they learned.

Q: "What element did you enjoy most from this module?"

- "The differentials and the graphics made it interesting and more real life."
- "The media elements made it much less tedious."
- "The hyperactive format of the presentation."
- "Coming up with the diagnosis and also the history was fun and interactive."
- "It was engaging and stimulated thinking."
- "It was interactive and clinically relevant."
- "It was interactive and facilitated very well, making it very entertaining."

## References

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