Consortium of Healthcare Education Online (CHEO) RTE Course Development Process

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Subject: RTE Course SME Review

Consortium of Healthcare Education Online (CHEO) partnered with Microburst Learning (MBL) to work with instructors to create four (4) MRI courses.

The purpose of the courses is to provide innovative and sophisticated applications of technology to effectively teach content to students, enable students to teach themselves and each other, and/or allow students to engage in hands-on learning. Online and technology-enabled learning strategies can support competency-based assessment models and models for accelerated learning.

MBL used the following process to build these courses.

Development

MBL's team created SCORM compliant lessons and created interactive elements to use within the courses. Some examples of interactive elements that were used are drag and drop activities, virtual process interactions, virtual scenarios, and step-by-step process interactions. The aim of the interactions was to make the courses more engaging to the students and to give the students a virtual "hands-on" experience that offered them a deeper level of learning.

MBL developed a custom rubric that analyzed each course on a number of standards, including ADA Compliance, ADDY Design Standards and compliance standards from the Skills Commons Accessibility Checkpoints Guide. MBL representatives also attended a Storyline conference on accessibility and a U.S. DOL workshop on accessibility and included those findings in the rubric. MBL focused accessibility features for these lessons for those that are hearing impaired and/or colorblind.

Additionally, MBL included a number of AIM/CAST Compliance standards on the rubric, including:

- Closed Captioning in videos (and/or transcripts as requested)
- Control of volume for the video and narration on the slide
- Video and audio with no music in the background
- Video controller where the user can play, pause and go to a direct location in the video
- Text accessible via JAWS screen reader
- Flicker reduction (no flashing or blinking objects or other elements with a frequency greater than 2 Hz and lower than 55 Hz)
- Color coding is not used as the only means of conveying information indicating an action, prompting a response or distinguishing a visual element

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- Color contrast approved ratio for background and foreground colors is 4.5:1 or greater
- Contains Clear and Consistent Navigation
- Attachments and lessons are in Word vs pdf and have contrast between headings, text, and backgrounds
- Hyperlinks are active and clearly identified
- Audio/video content is shown in a media player that supports closed captioning

MBL reviewers used this custom rubric to develop each course on the aforementioned standards.

Work with Subject Matter Experts

MBL worked with instructors to determine content and scope to include in the courses. For some courses, MBL filmed processes and took photographs to support content. Based on the content from the instructors, MBL scripted and built out e-learning lessons.

MBL then sent the completed SCORM packages to the Subject Matter Expert (SME) designated by the college for review. SMEs were instructed to review the courses for content accuracy, functionality and design. Additionally, SMEs were instructed to review the narration for pronunciation of technical and scientific terms. MBL made any modifications requested by the SMEs and this review process was repeated until the packages were approved.

The following SMEs were provided by CHEO and were involved in this process:

- Tiana Lemley

Additionally, MBL worked with two (2) SMEs who work directly in the field:

- Natalie Tilton
- James McKay, MD

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Additional Information

For additional information regarding Microburst Learning's review process and custom rubric, please call 803-719-5073.

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