EME6028 Interactive Media

E-Learning Module Development Project (Captivate Projects)

IMA4 Proposal: Amanda Glover

A. Basic Information

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B. Problem, Need, or Opportunity

Within our school district, district level Math supervisors provide a Curriculum Guide which highlights the standards and domains needing to be taught within an estimated amount of time. This guide also provides suggested resources to use; however, there are no online curriculum resources listed to use which could allow for a flipped, or blended learning environment. A flipped learning environment is when students are previewing the standard content (via online modules) at home which allows for the majority of "teaching" to be self-paced and done independently in the comforts of their own homes. The teacher is then able to focus majority of the class time refining and enriching student understanding of the standards based topics. A blended learning environment is when the students could use the online modules to enrich, remediate, or support the learning taking place in the classroom.

C. Targeted Audience

For this e-learning module, the audience will be a fourth-grade student in a mathematics classroom, a third-grade student in need of mathematics enrichment, or a fifth-grade student in need of remediation. Some front loading would need to be done exclusively by the teacher for setting standards and expectations of work quality and accountability, but also regarding navigation of the Captivate platform. As I reviewed the platform myself, however, I found it to be very user friendly. Another audience that could benefit from this e-learning module are the parents of the child being taught the Area Model and Distributive Properties to. Parents often ask for resources to use with their child at home, but they need resources for themselves as well, to best support their child's classroom learning.

D. Learner's needs

- Colorful
- Animations, characters, videos
- Sounds, narrations, music
- Easy to navigate platform
- Opportunity for immediate feedback
- Content broken into small chunks

E. Learner's Environment

Within the classroom setting this e-learning module could be used in a variety of ways. Students could be completing the assessment tasks independently at school while listening to the audio using headphones. Students could also be working with a partner at school, while playing the audio aloud and collaborating to complete the assessment questions. Either format would work well within the classroom as the students are used to mild background noise when complete online or paper-pencil tasks. Students/parents could also complete the tasks from the comfort of their own home, or "on the go" as long as they have a device with internet access, however headphones would be advised if there is not a "quiet" space for the child to work.

F. Resources and limitations

The content within the e-learning module are standards and strategies that are required within the fourth-grade math MAF standards.

"MAFS.4.NBT.2.5Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models."

Our district currently uses Khan Academy as a supplemental resource when planning and teaching our math standards. The quiz questions were of my own creation, and the supporting images were from license-free websites. If given more time, I could embed video of my own students completing the tasks and/or creating content for this E-Learning module.

G. Overall site schematic

To begin, I will introduce the module as well as the concept of multiplication through a true or false survey question and supporting video. I will then introduce the two strategies which are being covered in the e-learning module, Area Model and Distributive Property. The participants will analyze one strategy at a time using an informational Khan Academy video, followed by three to four practice questions which provide immediate feedback and progress in rigor. Finally, the participant will choose their own strategy from the e-learning module in which to complete two final assessment questions.