

- What is the title of your leadership project?  
5E Lesson Planning (Cell Theory)
- Which option did you choose and why did you select the option/topic?  
Option 1: Lesson-The focus of this professional development will be on a Endeavor resource that we believe is meaningful to our audience. To complete this project, we will present what a 5E lesson includes and provide examples as well as other resources to help guide our audience into completing a 5E lesson of their own at the end of our session.
- Who is your proposed audience? Which teachers will you serve with your PD and activities? What grades, subjects, and how many students do they teach?  
Our PD audience consists of multiple grade level and subject area teachers that will be in attendance at GRREC's STEMFest event that is scheduled to take place on November 15, 2022 in Bowling Green Kentucky. Grade levels and subject area teachers will vary.  
The lesson presented during this event is intended for seventh grade students. The subject area focus is Science related. We have approximately 30 students per class period here at MCMS. The time needed: MCMS- 42 minute class periods- Approximately 20 class periods.
- How will you project demonstrate integration of STEM in the classroom?  
Various technology based tools will be used throughout the science lesson. These are all resources we find to be beneficial for our audience.
- What outcomes or expectations do you hope to see for your educators?  
We hope to see teachers integrating 5E lesson planning, STEM and other resources such as NASA, canva, cornell note taking, technology based tools: digital notebooks, webquests, review gaming sites, Edulastic assessment site etc that we introduced to them during our PD time with them.

#### Professional Development Outline:

- 1) Showcase of 5E lesson planning.
- 2) Shared examples of what a STEM 5E lesson plan entails. Specifically, Cell Theory example.
- 3) Showcased student projects and how to modify assignments for exceptional education students.

4) Attendees will complete the graphic organizer over the cell theory 5E lesson presented.

5) Participants will collaborate and plan how they can improve a lesson and incorporate the 5Es into a new or previously used lesson.

6) “Hopeful that” Attendees will go home with a 5E lesson plan poster that they can utilize in their own classrooms!

Dallas and Chelsea will inform and educate session attendees on what the 5E model is. Session attendees will break down the 5Es using a graphic organizer and a lesson that we implemented and discuss the purpose and potential of each area. Next Chelsea will show them a sample 5E plan, showcasing how STEM and the 21st century skills are naturally embedded in this lesson’s model. Dallas will share resources that he has gathered along the way, such as NASA lessons and accommodations that were made specifically to this lesson. If time allows, we will allow teachers to think of a topic they teach in their content, and search through NASA assets or other shared sources to design/modify/order their own lesson.

- How will you follow up with the teachers in attendance?

We will follow up with teachers through a short survey. The survey will include:

1. PD Questionnaire
2. Email for additional questions and resources
3. Sharing of ideas used in their classroom