

Dear WWJH Powerful Partners,

We are voices of reason, patience, calm and stability for so many and yet, we are still struggling to find time to do it all while maintaining our own sanity. We have differences in student aptitudes, background knowledge and experiences, and academic gaps in their learning, and some students that are not able to read on grade level. All these factors complicate our ability to differentiate instruction, specifically effective differentiation. This is an issue everywhere in education, but I think the best solution for our students is rotational blended learning units.

Gifted and talented students need to have their knowledge and skills pushed to new limits and given freedom to create and explore the world around them. In order to effectively do this teachers need to use digital tools in order to enrich education and allow students more access to their communities and the real world. McKoy and Merry (2023) stated that access to digital tools leads to greater collaboration among students, communication skills are increased, and critical thinking and problem solving is greatly enhanced. The most effective way to differentiate learning to effectively give students access to these tools is through embracing a rotational blended learning model.

We have seen how powerful technology can be in empowering our students' to become active learners and create meaningful connections in classrooms. Project based learning has already been shown to increase student engagement and achievement in several studies including one focusing on middle school chemistry. Why not harness this power of choice for students from the introduction of a unit all the way to the final project and exam?

There will be three main components in this rotational blended learning model that students will have to work through at their own pace with the teacher guiding students to the next portion as needed in a small group setting based on their levels of understanding or misconceptions. The major unit components are introduction and foundations, main lesson and supportive or practice materials, and a hands-on project or capstone lab/activity and students will only move to the next component after demonstrating mastery at the current level.

#### **Rotational Blended Learning Unit Breakdown:**

1. Introduction and Foundation- attention grabbing and engaging to unlock the students' interest and natural curiosity; allows students to explore relevant background knowledge and experiences they already have that will help them in the unit
  - a. Also a good point to introduce lesson vocabulary and important phrases
  - b. This is where some students may spend more time as they need to fill experience and background knowledge gaps
2. Main Lesson and Practice- This can be teacher led or utilize an online modality with multimedia sources in which students learn the skill or topic outlined in the TEKS.
  - a. Teacher will facilitate the lesson and make sure that all students are directed to important information
  - b. Students will then be directed to practice the skill in a traditional modality (worksheet, reading comprehension packet, etc) or a digital one
  - c. Students will then have to demonstrate mastery by creating something to show mastery of the direct teaching
3. Unit Project or Capstone Activity/Lab - students at this point in the lesson will be given a real world problem or issue that they will have to research and then create a solution for (capstone lab or activity may be more appropriate depending on the content and subject area)
  - a. This is where real connections to the world and the community will be made and a deeper understanding will occur

I am excited to pilot this blended learning model in my classroom and share the data and results at the end of the school year. After studying the current trends and studies such as Zhao and Wang (2022) which found that students involved in project based learning units showed substantial growth in academic skill and knowledge acquisition, more positive outlook on school and learning as a whole, and even showed growth in a positive mindset; I hope to report similar benefits. The key benefits being higher student engagement and increased buy-in from the students and parents alike, by building an environment where students feel that they are learning important life skills and don't perceive the lessons as "wasted time". Students will start feeling that they are less micromanaged and they will not constantly be comparing their perceived intelligence to each other, which also builds a more positive culture and decreases negative and off-task behaviors.

Thank you for your consideration,  
Ashley Grundhaser

\*\*\*I have compiled a list of articles, literature reviews, case studies, and more that I can share with you if you are interested in these resources for further contemplation for approval of my proposed blended learning model.