Implementation Timeline:
Blended Learning for an Engineering Class

By Pedro A Beltran Montalvo

Collaboration ♦ Innovation ♦ Transformation

During the 2021-22 school year, our Engineering Club will be used as the foundation to develop an Engineering Course to be included in our school Master schedule during the 2022-23 school year. The structure for this class will be provided using blended learning and computational thinking, applying Engineering design and Authentic learning. Students will have an opportunity to learn through online resources, peer collaboration, teacher facilitation, and student-led instruction.

Three phases will be essential to pilot this blended learning model seamlessly:

Phase 1: Planning and researching

March-May 2021

- Share vision via proposal letter, literature review, and promotional video.
- Developing the structure and PD needed to transform the initiative with the inclusion of a blended learning
- Evaluation structure for the pilot program.
- Gathering resources the school has for engineering, budget, and looking at potential costs if new or updating equipment is required.

June-July 2021

- Gather all investigations and prepare deployment plans.
- Planning introduction of blended learning and computational thinking for teachers.
- Development of the blended model to be used in the Engineering Club.

August 2021

- Recruitment of students to participate in the Engineering Club.
- Execution of data collection (Pre-survey).

Phase 2: Pilot Development

September - November 2021

- Implementation of the Blended Learning and Computational Thinking in our Engineering Club.

December 2021

- Debrief with students to discuss areas for improvement.
- Analyze data collected and reassess forward progress.

January - February 2022

- Continue Implementation of the Blended Learning and Computational Thinking in our Engineering Club.
- Creating Curriculum samples for Central Middle School.
- Execution of data collection (Post-survey)

Phase 3: Feedback and Adjustments

March-April 2022

- Continue Implementation of the Blended Learning and Computational Thinking in our Engineering Club
- Debrief with students to discuss areas for improvement.
- Analyze data collected and reassess forward progress.
- Completing Curriculum sample for Central Middle School.

May 2022

- Presentation Pilot performance, curriculum, and outcomes.
- Plan and discuss development and budget for the school year 2022-2023.
- Approval at the school and district level of the initiative.
- Inclusion of Engineering Class in our Master Schedule.
- Identifying students to receive the schedule for the next school year.