

## 21st Century Community Learning Centers NASA STEM Challenges



## Professional Development Training Agenda Day One

8:30 to 9 a.m. Required Pre-Training Activity

9 to 9:30 a.m. Welcome

9:30 to 9:45 a.m. NASA Missions Today

9:45 to 10 a.m. The Engineering Design Process (EDP)

Essential Question: How does this process translate to students?

10 to 10:15 am The Engineering Design Challenge (EDC) Guide

Essential Questions: What are the most advantageous ways to utilize the EDC guides? How can an effective program planning tool support

positive student learning?

10:15 to 10:30 a.m. Break

10:30 a.m. to 12 p.m. Challenge One: Experiencing the Engineering Design Challenge (EDC)

Essential Question: How will students experience the phases of the

engineering design process (EDP) through a NASA EDC?

12 to 1 p.m. Lunch

1 to 2 p.m. Continue With Challenge One

2 to 2:30 p.m. Finalizing a Presentation

Essential Question: How can students be supported through the entire

engineering design challenge (EDC) to create a visual product

documenting the team solution to the challenge?

2:30 to 2:45 p.m. Break

2:45 to 3:15 p.m. Team Presentations

3:15 to 4 p.m. Dimensions of Success (DoS), Debriefing, and Close

Essential Questions: What did you learn today about the engineering design process (EDP)? What is your vision for incorporating DoS into

your program based on today's hands-on experience?



## 21st Century Community Learning Centers NASA STEM Challenges



## Professional Development Training Agenda Day Two

9 to 9:15 a.m. Welcome 9:15 to 9:45 a.m. Dimensions of Success (DoS) Overview Essential Question: How can out-of-school time (OST) programs use the DoS planning tool to impact students? 9:45 to 11:45 a.m. Challenge Two: Implementation of an Engineering Design Challenge (Including a break: (EDC) 10:30 to 10:45 a.m.) Essential Questions: What are the best educational practices for success? What are the best implementation tools to use with students? Debriefing and Questions on the Engineering Design Challenge (EDC) 11:45 a.m. to 12 p.m. and Its Implementation With Students Essential Questions: What did you learn today about the engineering design process (EDP), the EDC, and overall best practices? What questions do you have? What can teams share with the whole group? 12 to 1 p.m. Lunch Technology, Including NASA Scientist and Engineer Connections 1 to 1:45 p.m. 1:45 to 2:15 p.m. Program Evaluation Information Essential Questions: What are the evaluation components, including the use of Dimensions of Success (DoS) associated with this program? 2:15 to 2:30 p.m. Break 2:30 to 3:30 p.m. Dimensions of Success (DoS) Completion Essential Question: What does a quality out-of-school time (OST) environment look like using the DoS 4 domains and 12 dimensions as a project planning tool for student success? 3:30 to 4 p.m. Professional Development Post Survey