

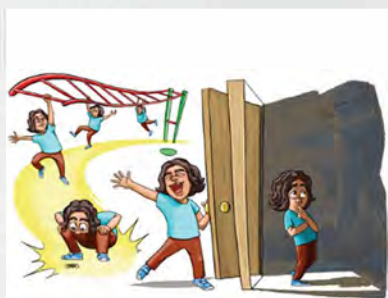


PROJECT BEES



Project Bees is a NSF DRK-12 (#2515930) three-year project with the goal of focusing on teachers' development of engineering practices, including how teachers support their students' development of engineering-focused behaviors and mindsets through instruction. Through the use of research-based engineering curriculum, Youth Engineering Solutions (YES.mos.org) and the use of Universal Design and Research Based Practice for Students with extensive support needs our research team is developing equity driven engineering education.

Repeated storylines were added to engineering stories to increase student engagement and comprehension of the content.



Yazmin was fearless on the monkey bars, had confidence on stage, and didn't run from spiders. But Yazmin was afraid of one thing... the dark.

In the dark, Yazmin couldn't tell what was what!

ALL SAY TOGETHER:

Yazmin is afraid of the dark. OH NO!

Answer options with picture symbols were added to power point slides to provide student response options.



Response boards were provided to increase participation and open-ended thinking.



Questions about Hand Pollinators



- “Why did you choose to attach it using that material?”
 - “Because it was _____”

It was sticky



It was tight



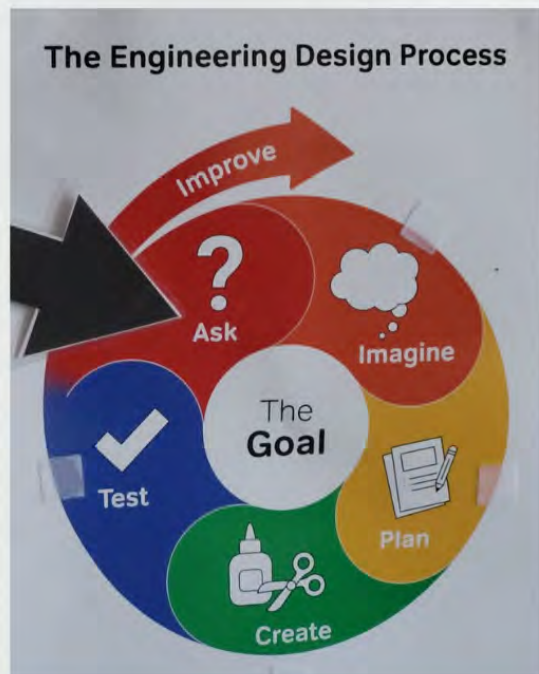
It was flexible.






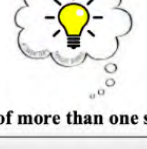
This is a collaboration between The University of Texas at Arlington, the University of Louisville, the Museum of Science – Boston and the National Science Foundation, Project Bees is a NSF DRK-12 (#2201407) three-year project with the goal of focusing on teachers' development of engineering practices, including how teachers support their students' development of engineering-focused behaviors and mindsets through instruction.



PROJECT BEES



Focused on targeted engineering habits of mind defined in student-friendly language. Practices are embedded into lessons and modeled and prompted during design challenges.

|  Student Engineering Practices | |
|---|--|
| Solve problems in context |  I think about problems in the situation. |
| Persist through and learn from failure |  I try and try again to make things better. |
| Envision multiple solutions |  I think of more than one solution. |

Digital choice boards were provided for students to enhance engagement within the engineering design process.

**Plan Our Hand Pollinator**LESSON 5

Circle the materials your group will need.

| | | | | | |
|--|--|---|--|--|--|
|  coffee stirrer |  craft stick |  eraser |  feather |  felt |  flat marble |
|  pipe cleaner |  pompom |  straw |  string |  toothpick |  wire |

 Engineering Hand Pollinators

