

16th annual VISIONERING

February 20, 2016

Visioneering is a free, half-day event held on the SMU campus that brings together middle school students from across North Texas to engage with engineering concepts.

Held annually in February since 2000 around National Engineers week, this event celebrates the creative problem solving side of engineer.



2 nu nu Ζ 0 -S

The morning of Visioneering started with an exciting opening ceremony in McFarlin Auditorium on the SMU campus. The keynote speaker for 2016 was Stephanie Butler, Technology Innovation Architect at Texas Instruments.



The 2016 Design Challenge was created by Gray Garmon, visiting clinical professor of Design and Innovation at SMU Lyle School of Engineering, with a Master's in Environmental Engineering. Gray has a Master of Architecture from the University of Pennsylvania and served in the Peace Corps for two years.

2016 Design Challenge: Designing the Classroom of the future (2025)

Background:

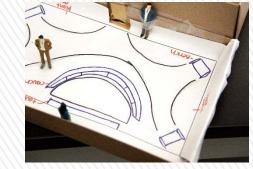
un un

ini ini

The needs and demands of students are changing. It's easy to see how new technologies are influencing the way we learn, but it's also important to redesign the class space to accommodate the future of learning. Video calls allow us to connect to classrooms all over the world, but views of nature outside the window have been shown to improve test scores. Classrooms in the future should have new and innovative designs.

Challenge:

In this challenge, you need to design a classroom for 2025. We are not talking about Star Wars and the Jetsons' futuristic classrooms, but 10 years from now we could be going to school in a completely new environment. We want your team to create a classroom of the future that will improve student learning.







Next was an authentic engineering design competition, where teams of students moved to classrooms across campus to collaborate on the Design Challenge. Each team was paired with a mentor who is a professional working in a field of engineering or a Lyle Engineering student.

<u>_</u>



Students working on the projects to solve the Design Challenge.



~ R un un nu nu Ζ

At the end of the challenge, each mentor judged two other teams' final Design Challenge projects. All students were required to participate in the presentation.



an m Ζ 5

Judges forms were collected and students returned to McFarlin Auditorium for snacks, technology demonstrations in the lobby, and an Engineering Panel presented by our sponsors. Students and volunteers were also treated to a lively performance by the TI Jazz band.



2 un un ini ini Z 0 5 To



TEXAS INSTRUMENTS

Impacting Lives through Technology Award > Winner: Team 33 from Florence Middle School



Leadership of Tomorrow Award Winner: Team 75 from Westwood Junior High







Connecting the Community Award Winner: Team 11 from St. Thomas Aquinas

~ 2 un m nu nu Ż \$ \$ To



A Textron Company

Smart Solutions Award Winner: Team 3 from Jackson Technology Center

2016 by the Numbers

703 middle school students

83 teams

41 middle schools

29 SMU volunteers

65 professional mentor volunteers from 38 companies

6 sponsors



Student Feedback

The value of Visioneering 2016 as a learning experience for my students: 67% Excellent 27% Good

Opening ceremony presentation: 40% Excellent 47% Good 13% Average

Design challenge project: 47% Excellent 53% Good



The value of Visioneering in linking math, science, engineering and technology: 40% Excellent 47% Good 13% Average

How was your experience with your mentor: 33% Excellent 13% Good 40% Average



I would like for my school to be invited next year: 100% Yes

Teacher Feedback

The value of Visioneering 2016 as a learning experience for my students: 67% Excellent 27% Good

Opening ceremony presentation: 40% Excellent 47% Good 13% Average

Design challenge project: 47% Excellent 53% Good



The value of Visioneering in linking math, science, engineering and technology: 40% Excellent 47% Good 13% Average

How was your experience with your mentor: 33% Excellent 13% Good 40% Average



I would like for my school to be invited next year: 100% Yes

Teachers' Comments

"This was my first time to attend and I was impressed. This was a fun way to get kids to think, create, work together, and experience realworld challenges. It was a pleasure to attend and I'm already excited for next year (and to have my child attend some day)."

"Thank you so much for all the hard work you and your team have done to make Visioneering such as wonderful event for our students. I think, in addition to learning about engineering and the engineering design, our students (especially this year) have learned what it means to be a team. Thank you and we look forward to Visioneering 2017!"



