



*Maximizing Motivation,  
Targeting Technology*



National Science Foundation  
WHERE DISCOVERIES BEGIN

TEXAS A&M  
UNIVERSITY  
COMMERCE

# Project Personnel

**Dr. Gil Naizer-** *Principal Investigator*

*Curriculum & Instruction Department*

**Dr. Ban-An Li-** *Co-Principal Investigator*

*Physics Department*

**Dr. Sam Saffer-** *Co-Principal Investigator*

*Computer Science Department*

**Dr. Tracy Henley-** *Co-Principal Investigator*

*Psychology & Special Education Department*

**Jeana Yeager-** *Consultant*

*Voyager pilot*

# Project Goals

- Design & implement strategies to sustain student interest in STEM fields
- Prepare students attending rural middle schools for the STEM workforce through development of knowledge & skills of both students & teachers
- Provide STEM workforce information to parents, students & teachers to encourage participants to persist in rigorous high school & college courses

# Our Participants

- 3 rural schools in NE Texas each year
  - 2009 School partners
    - Bonham ISD
    - Bland ISD
    - Clarksville ISD
- 12 students & 2 teachers per district per year participate in summer camp & academic year workshops/field trips
- Over 100 students & 18 teachers directly served for the 3 year project

# Recruitment Strategies

Selection of school districts:

- Rural NE Texas schools
- Low performing districts (based on state tests in science & math)

Partnership with districts to identify students:

- Low SES
- Underrepresented populations
- Future first generation college students



•Texas A&M University-  
Commerce  
•Dallas

★ Austin

■ Area served by M²T²

# Benefits for Teachers

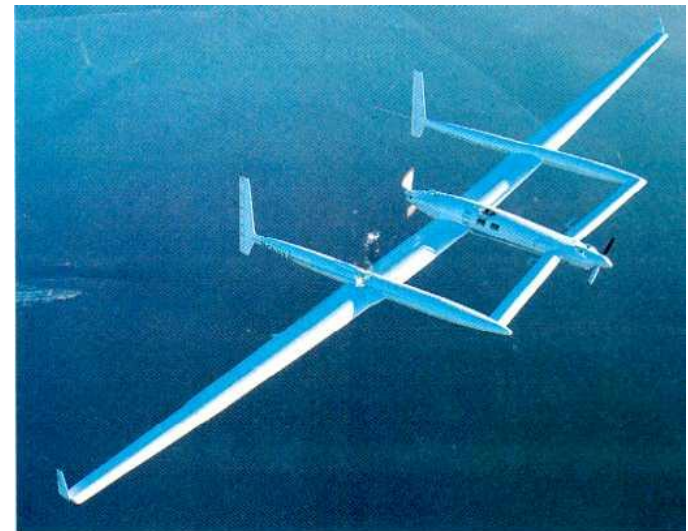
- Increase knowledge & confidence in science, math & technology
- Establish supportive learning communities
- Utilize partnerships within university, community & school settings

# Benefits for Students

- Create a vision that a college degree & STEM career are a possibility
- University campus learning environment
- Capitalize on interest in gaming systems
- Increase problem-solving skills
- Interaction with STEM role models
- Challenges based on real world situations

# Hometown Role Model: **Jeana Yeager**

- Graduate of Commerce ISD
- Aviator most famous for flying non-stop, non re-fueled around the world in December 1986
- Inspiring female to others in the math, science, and aviation world
- Role model to students in rural areas
- Consultant for M<sup>2</sup>T<sup>2</sup> at Texas A&M University- Commerce



Voyager flying near the California coast, en route to a place in aviation history