

Fun With Engineering, Science, and Technology (FEST)

Farmersville High School
Science and Technology (FHSST)
Booster Club

Public Meeting
25 January 2007

*Presented by
FHSST Booster Club
www.farmersvillefest.org*

Agenda

- FEST Basics
- FEST News
- 2006 Successes
- 2006 BEST Presentation
- FEST Student Organization and Fund Raising
- Science Olympiad
- 2007 Goals
- Election of Officers
- Questions

FEST Basics

- Fun with Engineering, Science, and Technology (FEST) mission:
 - Advance interest in engineering, science and technology throughout our schools and community
- FEST is geared to:
 - Promote student interest in engineering, science and technology on a personal scale
 - Engage the whole community in the development of local students
 - Facilitate career success
 - Promote creative thinking

Community involvement is key!!!

FEST News

- Newspaper article
- New calendar being developed for 2007
 - Will be posted on www.farmersvillefest.org
- Thank you to our teachers and administrators
 - Administration
 - School Board
 - Jeff Adams (superintendent)
 - Scott Moss (FHS principal)
 - Teachers
 - Kevin Hamilton
 - Jerry Shaffer
 - MaryAnne Truemper

Super support from our FHS staff!!!

2006 Successes

- FEST and FHSST Booster Club created
 - Bylaws approved
 - Checking account established
 - Membership roster maintained
- FEST website developed
- CoCo BEST hub event - 21 October 2006
 - First place - Competition
 - Second place - BEST Trophy
- Texas BEST tri-state regional event - 2 December 2006
 - Fourth place – Competition
- SolidWorks program started
- Fundraising program developed

We want to build on our 2006 successes

2006 BEST Presentation

- Student presenters
 - Gabriel Clark
 - Philip Kleiman
 - Marshall Long

*This year's presentation was well received at the CoCo
BEST hub competition*

Captain P.L.A.N.E.T. Corp.

(Protecting Laundry Against Nefarious Evil Transcendentalists)

Farmersville High School

2006

BEST Robotics Team

A Look At The Captain P.L.A.N.E.T. Product



- Designed for the laundry market.
- Can hang and take down laundry for 355 points in only three minutes.
- Designed to beat out all other competition.

Mission Statement

We would like to further our technical skills, team building methods, and knowledge in engineering, leading to an organized development and construction plan, resulting in a well-designed and functional robot. While on our way to Regionals, we plan to enjoy free pizza and keep all of our phalanges intact.

Operations



- Headquarters located at Farmersville High School (FHS)
- Manufacturing Facilities located at FHS Ag Shop and Ben White's House.
- Design and manufacturing team comprised of FHS students from Freshmen to Seniors.
- Website located at: <http://farmersville.ednet10.net/best/index.htm>

Sub-Teams

- During the second meeting, the large group was divided into several design and build groups. They were:
 - Arm/Claw Team
 - Base Team
 - 3D Modeling Team
 - Practice Course Build Team
 - BEST Team

Senior Employees



- Philip Kleiman
 - 5 years experience
 - SolidWorks Designer
 - Manufacturing

- Anthony Serio
 - 4 years experience
 - SolidWorks Designer
 - Manufacturing



- Adam Stapleton
 - 4 years experience
 - Design and Manufacturing



- Marshall Long
 - 6 years experience
 - Design and Manufacturing



Junior Employees

■ Kenny Zingaro

- 4 years experience
- Manufacturing
- Integration and Testing

■ Paul Kleiman

- 5 years experience
- Systems Engineering
- Manufacturing
- BEST Team
- Integration and Testing



Sophomore Employees



- Zachary Moon
 - 2 years experience
 - Designer

Freshmen Employees



- Gabriel Clark
 - 2 years experience
 - SolidWorks Designer
 - Manufacturing

Our Mentors

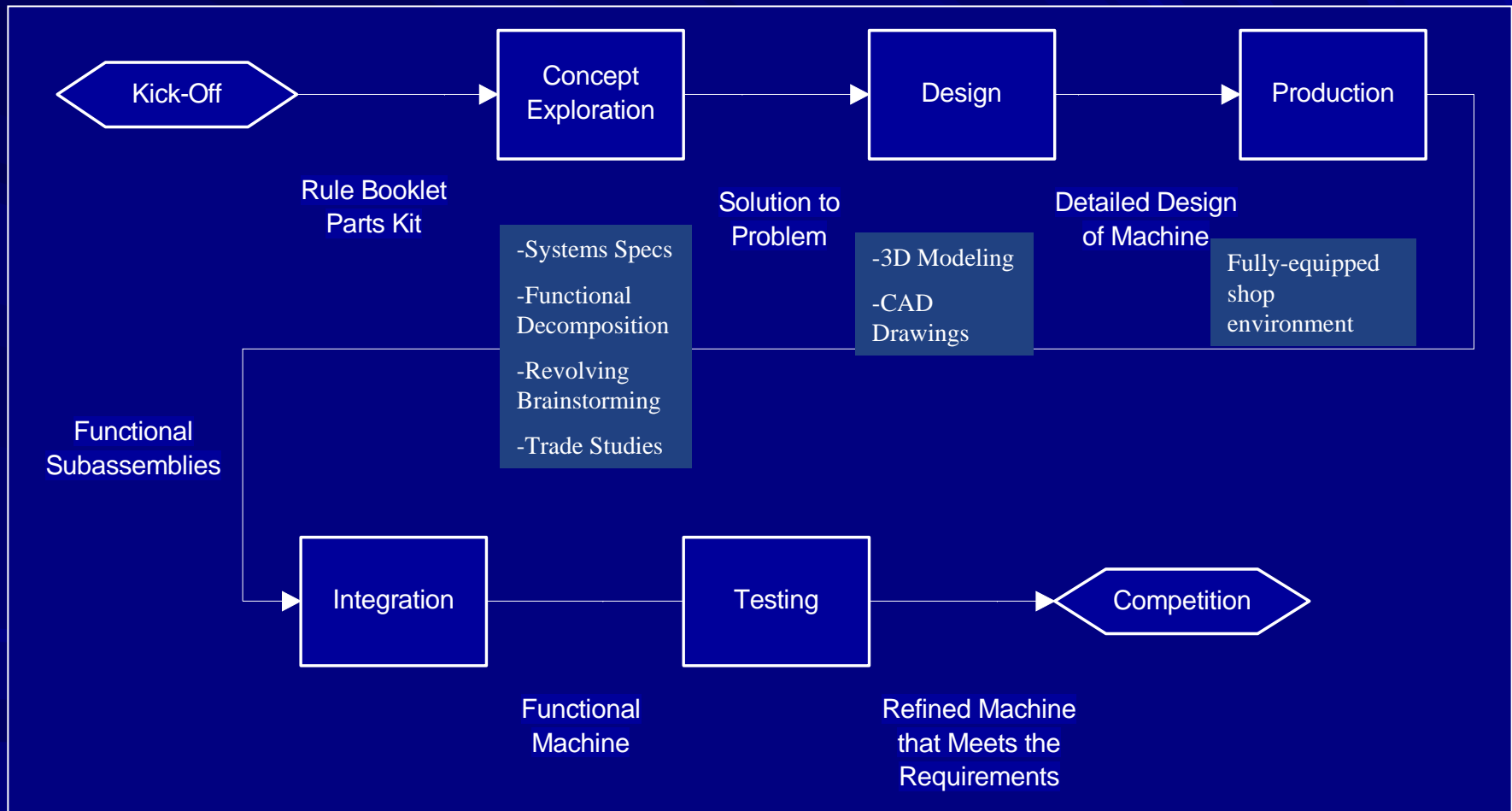
- Dr. Jerry Shaffer- Sponsor/Company Owner/High School Physics Teacher
- Kevin Hamilton - High School Chemistry Teacher
- Ben White – Consultant
- Michael Snyder – Underwriters Laboratories
- Carol White- Texas Leadership Bank



3D Modeling Team

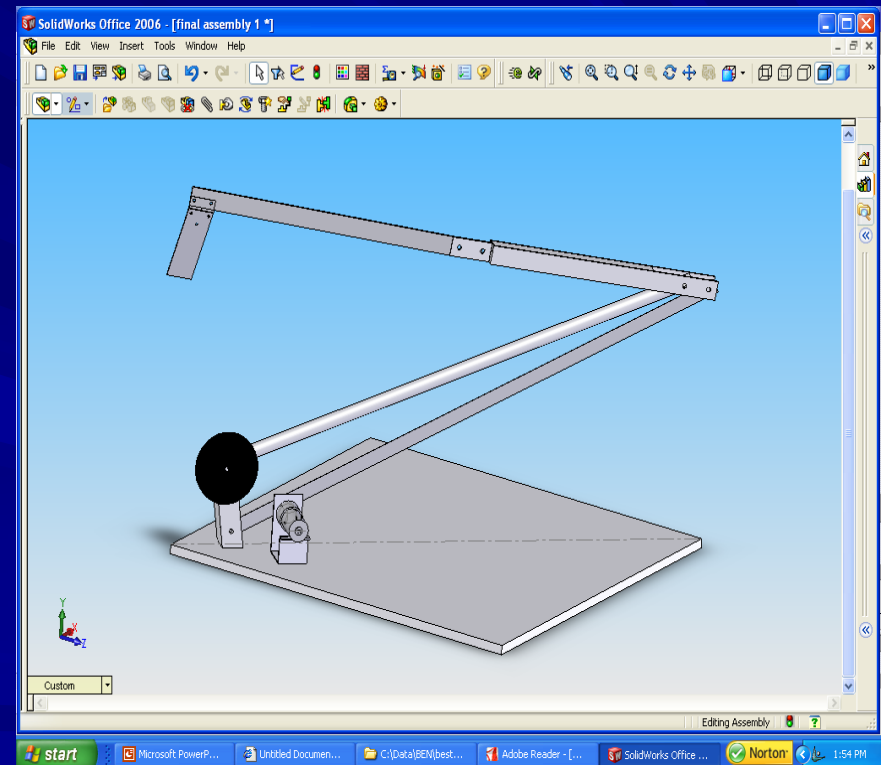
- Sub team formed to learn SolidWorks design tool.
 - Anthony Serio
 - Philip Kleiman
 - Gabrien Clark
- Simulated and designed all aspects of the robot in virtual space.
- Drawings and diagrams were vital in the build process, as we knew exactly what to build, with exact measurements and specifications.

Design and Build Process



Design Example – Arm Team

- 4-bar linkage
- Pulley
- Arm and claw integration



Promotional Efforts

- Our Robotics team is part of Fun With Engineering, Science, and Technology (FEST), a high school organization that promotes activities such as BEST, Science Olympiad, and Rocketry. The community was very supportive of our team throughout the season.

Summary

- Captain P.L.A.N.E.T. is best product
 - 355 point capability
 - 60" reach
- Best team with best processes
 - Diversity
 - Experience
 - Process Knowledge

FEST Student Organization

- Officers elected
 - President – Anthony Serio
 - Vice President – Adam Stapleton
 - Treasurer – Philip Kleiman
 - Secretary – Kelsey Rohr
 - Recorder – Bri-Anna Johnson
- Fundraising in full swing
- Display booth being used to recruit new members

Science Olympiad Purpose

- To bring science to life, to show how science works, to emphasize problem solving aspects of science and the understanding of science concepts.
- To develop teamwork and cooperative learning strategies among students.
- To make science education more exciting so more students will enroll in science courses and engage in other science activities like science reading, fairs, meetings and field trips.
- To promote high levels of achievement and a commitment to excellence, to demonstrate that American students can perform at levels that surpass expectations of even practicing scientists and engineers.
- To attract more students particularly females and minorities to professional and technical careers in science, technology, and science teaching.

Science Olympiad Mission

- To Create a passion for learning science by supporting elementary and secondary Science Olympiad tournaments at building, district, county, state, and national levels with an emphasis on teamwork and commitment to excellence.
- To improve the quality of K-12 science education throughout the nation to change the way science is perceived and the way it is taught (with an emphasis on problem solving skills and hands-on, minds-on constructivist learning practices). This goal is accomplished through in-depth core curriculum training workshops and the distribution of curriculum materials to thousands of teachers.
- To celebrate and recognize the outstanding achievement of both students and teachers in the areas of science and technology by awarding thousands of certificates, medals, and scholarships.
- To promote partnerships among community, businesses, industry, government, and education. There are over 45,000 volunteers representing these groups at the Science Olympiad events.
- To improve and restructure the way science is taught and learned by conducting staff development and curriculum development workshops.

2007 Goals

- Build on 2006 successes
- Successful fundraising activity
- Become a part of the school's budget
- Stand-up Science Olympiad program
 - First year
- **Start student scholarship program**

Things are improving in 2007!!!

Current Board

- President – Ben White
- Vice President – Mike Snyder
- Secretary – Kevin Hamilton
- Treasurer – Jerry Shaffer
- FHS School Representative – Scott Moss
- Membership Chairperson – Eddy Daniel
- Media Relations Chairperson – **Joe Helmberger**
- Fund Raising Chairperson – Wiley Sullivan

The FHSST Board provides steering for FEST activities

Future Board

- Any nominations from the floor for Board positions
- Possible recommendation
 - President – Ben White
 - Vice President – Mike Snyder
 - Secretary – Kevin Hamilton
 - Treasurer – **Jerry Shaffer**
 - FHS School Representative – Scott Moss
 - Membership Chairperson – Eddy Daniel
 - Media Relations Chairperson – **Pete Serio**
 - Fund Raising Chairperson – Wiley Sullivan

Questions

- A few minutes to answer questions
- Sign-up now if you have not already