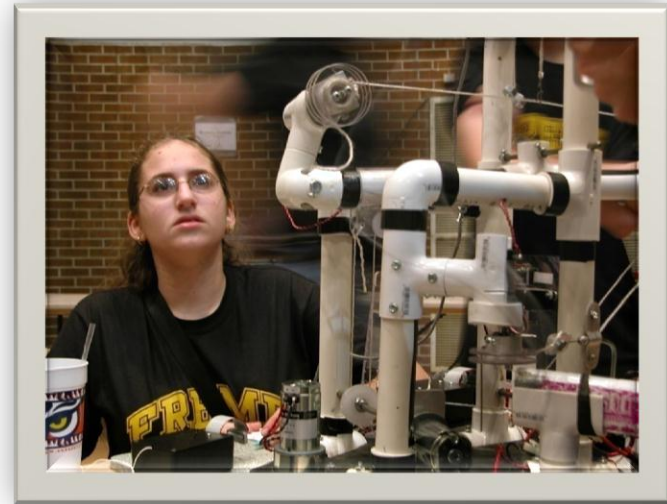


# BEST Robotics Philosophy



- BEST establishes an **engineering culture** in schools.
- BEST students become **competent and confident** in:
  - abstract thought
  - self-directed learning
  - teamwork
  - project management
  - decision-making
  - problem-solving
  - leadership
- BEST students become **technologically proficient** and better prepared for the workforce.



# BEST Robotics Philosophy



## BEST students...

- Better understand mathematical concepts and applied physics.
- Experience **real-world** science and engineering challenges.
- Understand what engineers do – **engineering is “demystified.”**
- Experience “design-to-market” product development - **experience that is transferable to all career pursuits.**

# BEST Robotics Philosophy



- **Free to schools**
- **Any school can participate (even homeschools)**
- **Students perform the work, not the adults**
- **Mentors serve as guides only**
- **School-based - closely tied to K-12 STEM education**

# BEST Robotics

## The Robotics Game – UAB 2012



- **Kick Off Day (KOD)**
  - August 23rd
  - Try to host in same venue as Game Day
- **Mall Day**
  - September 23<sup>rd</sup> (**typical Mall Day**)
- **Game Day**
  - October 6<sup>th</sup> – all-day event (sometimes split into 2 days)
  - *Hubs typically secure this date & venue first, then work backwards to plan venues for KOD and Mall Day*
- **Regional Championship (Nov - Dec)**
  - Top Robotics & BEST Award teams advance



# BEST Robotics



- **Event personnel (60-75 people)**
  - Registration
  - Hospitality
  - Game (Head Ref/4-8 referees\*; Head Scorekeepers/2 assistants;  
4 Staging; Pit Boss/6-8 Pit crew)
  - Audio-visual (likely venue personnel)
  - Judging assistants (2)
  - Judges (**depends on number of teams**)
    - 8-12 teams
      - Robotics (6-10)
      - Notebooks (6)\*
      - BEST Award (**3 x # of BEST Award teams**)
        - Marketing Presentations\*
        - Team Exhibits\*
        - Spirit & Sportsmanship

# **BEST Robotics IEEE Alabama Section**



- **5<sup>th</sup> year to be involved with the UAB Blazer BEST competition**
- **Part of the "A-Team" Committee**
- **A GOLD sponsor of the Blazer BEST Competition**
- **involved in the Regional Competition**
- **Providing volunteers for the Shelton State BEST competition**

# BEST Robotics

## “A-Team” Committee



- **Assembly of "returnables" and "consumables" kits**
- **Blazer BEST Kick-off Event**
  - **Set-up and takedown of the game field before and after the all events**
  - **Distribution of the "returnables" and "consumables" kits to participating teams**
- **Blazer BEST Mall Day Event (Riverchase Galleria)**
  - **Assistance to teams and promotion of event to spectators**
- **Blazer BEST Game Day Event**
  - **Team Check-in**
  - **Compliance Check**
    - **Weigh-in**
    - **Size Verification**
    - **Component Check**
  - **Judges**
    - **On the Game Field**
    - **Website Competition**
- **Multi-media (photos and video of the entire event)**
- **Retrieval of the "returnables" kits**

# BEST Robotics Game Day



- **So, why are we so committed to BEST Robotics?**
  - Answer





# BACKUP SLIDES

Thanks to Hassan Moore at UAB for providing the slides.

# BEST Robotics = Capacity Building



“Nationwide, most students are graduating with only a minimal understanding of one of *the most powerful forces shaping society today.*”

~ International Technology and Engineering Education Association

# BEST Robotics = Capacity Building



“...developing and strengthening the skills, instincts, abilities, processes, and resources that organizations and communities need to survive, adapt, and thrive in this fast-changing world.”

Ann Philbin, *Capacity Building in Social Justice Organizations*, Ford Foundation, 1996

Capacity building gives a community fluidity, flexibility and functionality to adapt to change.

# BEST Robotics = Capacity Building



In regards to BEST students, capacity building relates to:

- leadership development
- presentational skills
- technical skills
- organizational skills
- problem solving abilities
- other areas of personal and career development

UAB Blazer BEST directly involves around 800 junior high and high school students in BEST Robotics each year!

# BEST Robotics = Capacity Building

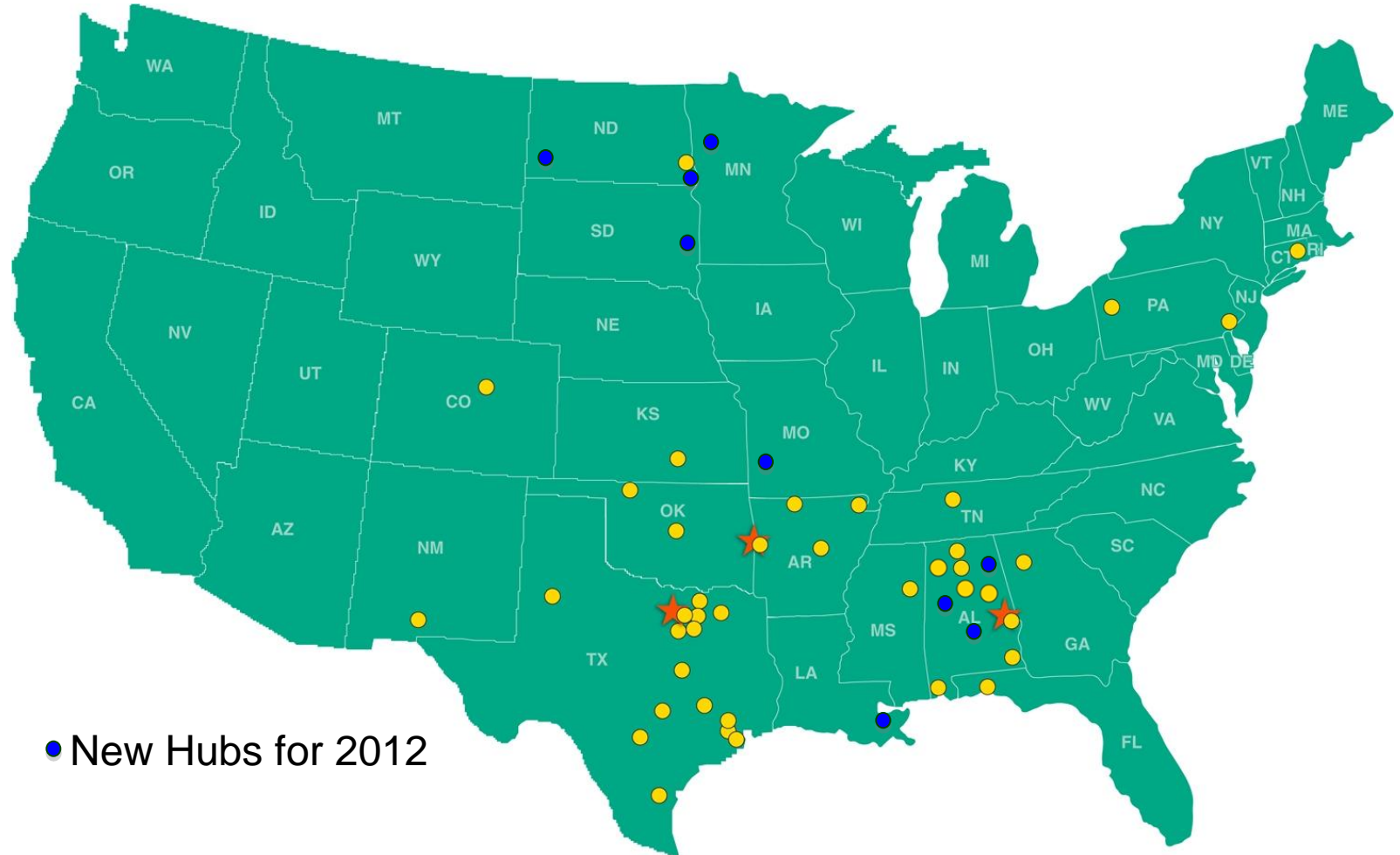


We are **not** solely about robotics.

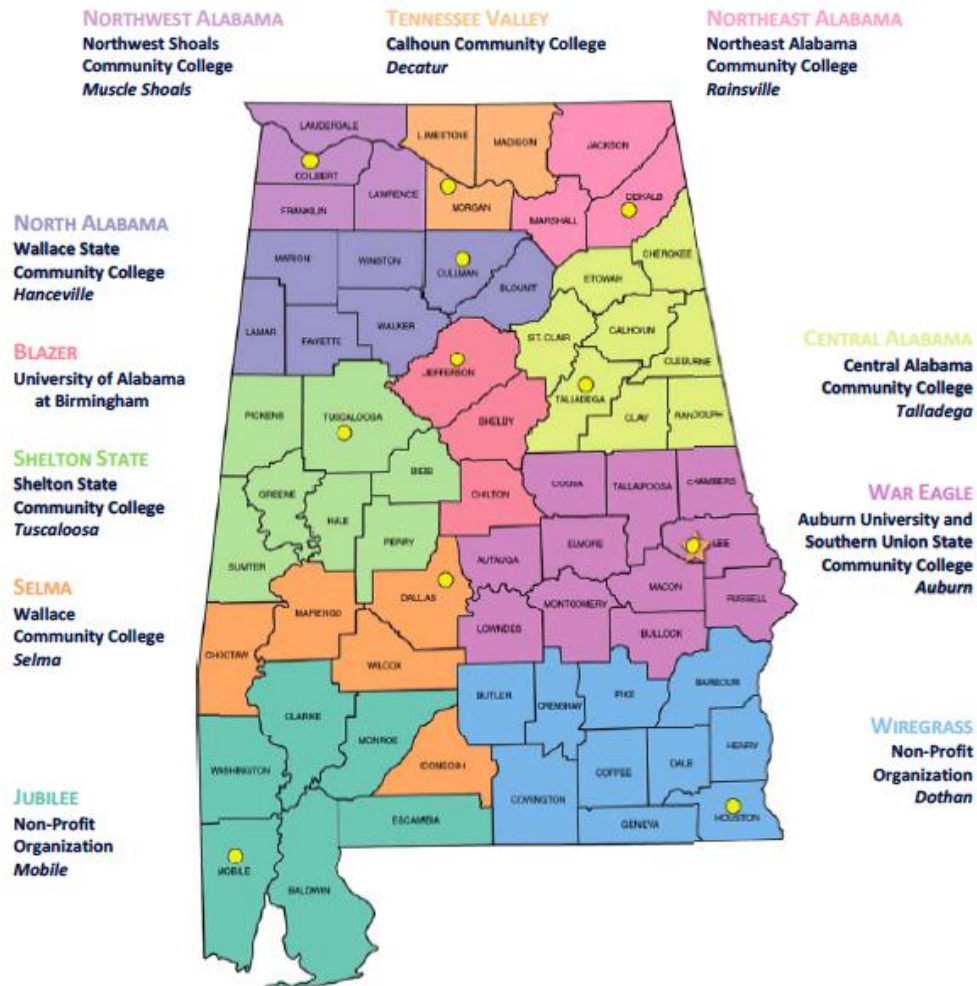
We are about teaching students how to think through a problem (**any kind**), analyze it, and solve it.

This is what we all need to build **capacity** in our communities and workforce.

# BEST Robotics HUB Locations (50+ representing 16,000 students)



# BEST Robotics Alabama HUB Locations (currently 11)



★ South's BEST Regional Robotics Championship  
Auburn University  
The top 60 BEST teams from 16 Southeastern hubs



# BEST Robotics Blazer BEST



## In the 2011 National Competition (from the Blazer BEST Hub)...

- Oak Mountain High School placed 5<sup>th</sup> in the BEST Award;
- 5<sup>th</sup> in Project Notebook;
- 3<sup>rd</sup> in Marketing Presentation;
- 4<sup>th</sup> in Team Exhibit and Interview;
- 2<sup>nd</sup> in Spirit and Sportsmanship.
- The robot placed 15<sup>th</sup>.



# BEST Robotics Sponsorship Levels



<b>Corporate</b>	<b>\$15,000 or more</b>
<b>Platinum</b>	<b>\$5,000 - \$14,999</b>
<b>Gold</b>	<b>\$2,500 - \$4,999</b>
<b>Silver</b>	<b>\$1,250 - \$2,499</b>
<b>Bronze</b>	<b>\$500 - \$1,249</b>
<b>BEST Friend</b>	<b>Less than \$500</b>

*The more the gift, the more exposure and recognition for the sponsor*

# BEST Robotics Competition



## Two competitions/divisions:

### **Robotics** (the thematic game/engineering challenge)

- Includes a required *Project Engineering Notebook*

### **The BEST Award** (optional for schools)

- Robotics, Project Engineering Notebook, plus:
  - Marketing Presentation
  - Tradeshow Style Exhibit Booth
  - Judges Interview
  - Spirit & Sportsmanship
  - Robot Performance

# BEST Robotics

## The Robotics Game



- **New educational theme/challenge and field each year**
- **Challenge and field kept secret until Kick Off Day**  
**“unveiling”**
- **Playing field is usually a 24’ x 24’ configuration**
- **Points awarded for successful completion of tasks**
- **4 teams compete per 3-minute match**
- **Each team competes in 5-8 matches in a seeding round**

# BEST Robotics Typical Mall Day

