Getting Motivated About Motivate

Tactical Tech Tomato Turtles
2021 Kickoff Breakout Session

Who Are We?

- All attend Eagan High School

- Participated in FLL for 2 years as a team (some had prior experience)

- 4th year in FTC

- Chose team name in FLL

- Motivate award winning team at 2021 MN state tournament

What will we be going over?

- **What** is the motivate award?

- **Why** does motivate matter?

- **Who** can you involve in motivate opportunities?

- **How** do you plan and deliver motivate events?

- **Where** can you do motivate experiences?
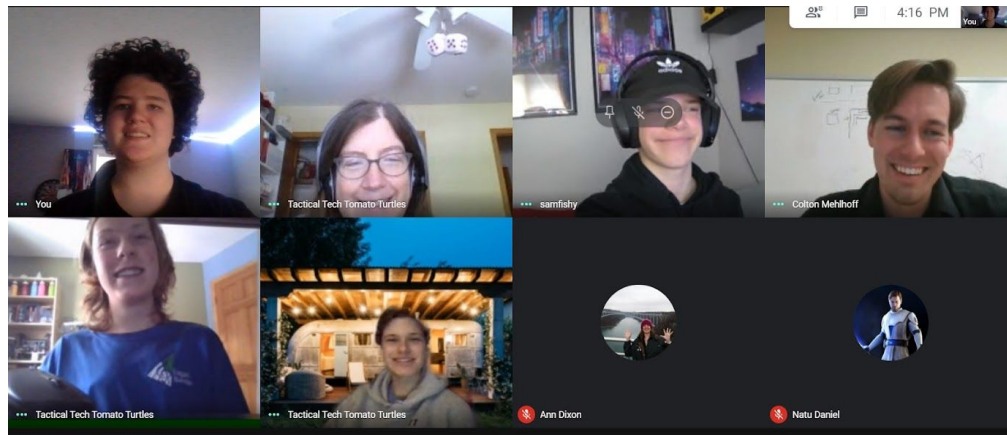
What is the Motivate Award?

- ## Motivate Award
  - Outreach
  - What Outreach qualifies
- ## What a team that wins the award looks like
  - Teamwork
  - Bringing people to FIRST
- ## Requirements for the award
  - Portfolio
  - Everyone has individual contributions
  - Team organization plan
  - FIRST Ambassador

Why is the Motivate Award Important?

Motivate:

- It's very rewarding
- You directly help people learn
- You get involved with STEM
- It's exciting to get people excited
- It can create connections
- You learn from teaching

Who can you involve in motivate opportunities?

- Participate in others' events
  - Teams
  - Companies and nonprofits
- Design and pilot your own outreach
  - Community/Public
  - Members of groups
  - Mentoring teams
  - Connecting with professionals

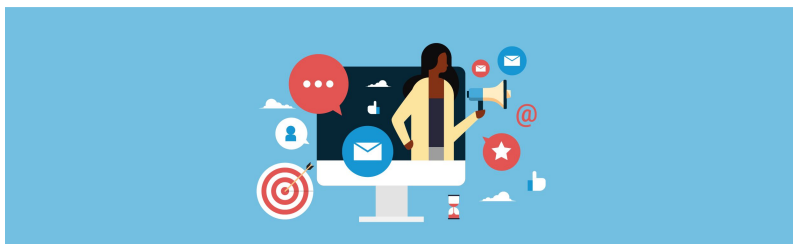Follow *everyone* on social media
Talk to *everyone*

How Do You Plan and Deliver Motivate Events?

- Establish goals
- How you are going to accomplish those goals?
  - Build a curriculum
  - Build a presentation from that curriculum
  - Practice and prepare
- Have multiple leadership roles to divide and conquer
- Establish a thorough organization and sustainability plan for events
  - Team identity, team impact, funding, materials, and backup presenters
- Be an ambassador for FIRST
  - Talk about FIRST during every presentation

Outreach Goals

Type	Goal	Achieved
Motivate	Motivate at least 50 students to get interested in STEM	
Connect	Meet with at least 5 experts in STEM fields that can improve our abilities in FTC	
Motivate	Meet with at least 5 other FTC teams to exchange ideas and learn learn from one another	
...	...	

Strategy to Achieve Goals

Type	Goal	Achieved
Motivate	Motivate at least 50 students to get interested in STEM	
...		

To achieve this goal:
- Where is their interest?
- Where could we make an impact?
- Do we want something repeatable?

Strategy to Achieve Goals

4-Pronged Approach

Repeatable curricula for Girls Scout badges to generate interest in STEM and FIRST

Interaction events to demo our robot, talk about what we do, and generate interest in STEM and FIRST

Community service events

Mentoring FLL and FTC teams

Girl Scouts Outreach

What did we do

How did we divide up the work and presentations

How did we advertise

How were we an ambassador for FIRST

Slide 1 (Who We Are):

Who We Are

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Slide 2 (Tell Us About Yourselves):

Tell Us About Yourselves

- Names
- Fun experience in your troop
- Favorite type of science

The Universe   Hierarchy of the Sciences

4

Slide 3 (Robotics competitions):

Robotics competitions

There are many forms of competitive robotics, but here are some we've had experience with...

FLL championships

FTC competition Video-
https://www.youtube.com/watch?v=z5J_oHmm52w8

FLL championships are graded on on core values, robot runs, programing, design, and project

FTC championship
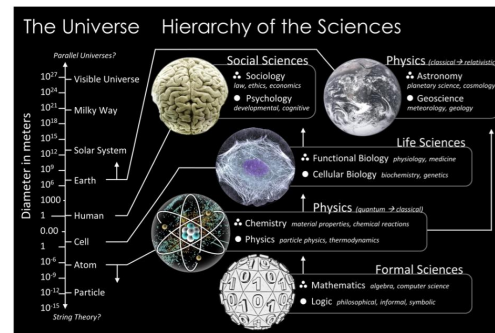
FLL competition video-
https://www.youtube.com/watch?v=0L_STanMK7A

FTC championships are more graded on Your robot performance, design, and outreach

Slide 4 (Entertainment Technology):

Entertainment Technology: What is it?

- The process of improving a form of entertainment by creating something to work with it.
  - Examples: Movies, theater lights, cameras, computers, CD's, ipod, DVD's, trampolines, and instruments, Lego's, and virtual books
  - What are some examples of entertainment technology that you see every day?
- Technological entertainment technology
  - Examples: CGI, immersive sound, holograms, 3D animation, Augmented reality, virtual reality, micro-LED's, claymation, video games, and cellular/wifi service
  - Do you have any technologic forms of entertainment technology in your household?

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Interaction Events

What did we do?

How did we find or schedule events?

How were we an ambassador for FIRST?

Results

How did we keep track of results (screenshot of spreadsheet)

What were the results - better than expected? why?

Girl Scout Programming Badges
2/20/20

Description:
We helped a girl scout troop get their programming badges in our ongoing girl scout badge program.

Goals:
To prepare for girl scout programming robots and programming for good badges, and present to girl scout troops.

Impact:
We successfully made a curriculum, and taught the girl scouts about coding, and how it works in a fun and engaging way.

What went well :
We were able to get the badges done and everyone finished successfully.

What to improve (What we learned):
We finished late which is an issue we are continuing to work on fixing.

Event Location:
St. Thomas Becket Church

Team Members attending:
Benjamin, Clare, Sam, Caden, Natu, and Ben

Type:
Motivate

Participants:
Troop Number 57704

Number Reached:
10 + adults

Prep Hours:
9hrs 15 min

Event Length:
2.5 hrs

Total Hours:
24hrs 15 min

Tour of PaR at 3M
2/14/20

Description:
We went to PaR Systems in Shoreview, Minnesota for a tour and to see coach Chris's project for work. We also looked at large-scale machinery.

Goals:
To learn about large-scale manufacturing and fully automated inspection equipment

Impact:
We learned about bug machinery and how to manage projects.

What went well :
The experience of seeing real machines inspired us.

What to improve (What we learned):
We learned about large scale machines and project management

Event Location:
PaR Systems. Shoreview Minnesota

Team Members attending:
Benjamin, Clare, Sam, Caden, Natu, and Ben

Type:
Connect & Motivate

Participants:
Engineers

Number Reached:
10 + adults

Prep Hours:
1

Event Length:
2 hours

Total Hours:
2

PaR 3M
Authorized Distributor

Date	Event	Team # Attend	Event Length	Hours Total	Number Reached	Connect(C) Motivate(M)
2/14/20	Tour of PaR at 3M	6	2	13	9	C, M
2/14/20	Set up for FRC Zero Tournament	2	5	8	participatin	C, M
2/15/20	Assist with EHS FRC Zero Tournament	1	3	3	participatin	C, M
2/20/20	Girl Scout Event: Programming Badges	6	2.5	24.25	12	C, M
8/24/20	Connecting with Joe Norby - RoboMechanics Lab at Carnegie Mellon University	4	1	7	7	C
9/8-9-9	High Tech Kids Kickoff Breakout Meetings 9/8 & 9/9	6	5	32.5	teams + ad	C, M
9/12/20	High Tech Kids Season Reveal Event	6	3.15	19.9	teams + ad	C, M
9/18/20	Thomson Reuters Presentation - Unconference	6	1	15	15+ profes	C, M
9/22/20	Robot Activity for Girl Scout Recruitment	1	2	5	4 + adults	M
10/6/20	Open Door Pantry Food Drive #1	1	1	5	unknown	C,M
10/10/20	Connecting with Veronica from Korn Ferry	5	1	11	1 + adults	C, M
10/11/20	Connecting with Lockheed Martin	3		4	8 + adults	C, M
10/18/20	Connecting with High Tech Kids Cohort	6	1.5	7	12 + adults	C, M
10/22/20	Girls are Powerful - COVID Panelist	1	2	6	40+	C
10/30/20	Target - Prepare to Launch event - Be Bold	1	2	2	those want	C
11/1/20	Connecting With High Tech Kids Cohort	6	1	7	participatin	M
11/6/20	Mentoring FOTS presentation (general)	6	2	20	4 + adults	M
11/7/20	Designing robots for Troops 57713 and 57708	6	2.2	32	11 + adults	C, M
11/8/20	Showcasing robots for Troops 57713 and 57708	5	2	17	5* adults	C, M
11/13/20	Target - Prepare to Launch Event - Building Meaningful Relationships	1	2	2	30 + adults	C
11/14/20	Presenting Ideation at MN Codes Summit	1	1.5	6	90 + recor	C, M
11/15/20	Connecting with High Tech Kids Cohort	6	1	7	50 + team	C, M
11/20/20	Mentoring FOTS: Programming Presentation	4	2	10	4 + coache	M
11/21/20	Girl Scout programming badge presentation	6	3	6	8 + adults	C, M
11/22/20	Girl Scout designing and showcasing badge event	6	2	18	7 + adults	C, M
11/22/20	Connecting with High Tech Kids Cohort	5	2	6	10 +	C
11/24/20	Connecting with professionals on portfolio, Alina Health, Securian Financial, & Thomson Reuters	6	1	12	5 + adults	C
11/25/20	Robot Design Review with Green Girls	6	2	15.5	10	C
11/29/20	Girl Scout designing and showcasing badge event	6	2	19.5	7 + adults	C, M
12/12/20	Crushbots FTC Eagan Connect Event	4	1.25	5	8	C, M
12/12/20	Open Door Pantry Food Drive #2	4	1	6.5	unknown	M
12/13/20	Girl Scout Programming Robots Badge event	6	2.5	14.5	7 + adults	C, M
12/14/20	3M Engineer Design Review	6	2	17.7	8 adults+te	C, M
12/20/20	Entertainment Technology Girl Scout Badge	6	2.5	24.4	4 + adults	C, M
12/29/20	CrushBots Eagan FTC Connect 2	4	1	4.5	6	C
1/9/21	Designing and Showcasing Girl Scout Badge	6	2.75	17.5	10+ adults	C,M
1/10/21	Proramming Robots Girl Scout Badge	6	2.5	15	6 + adults	M
1/10/21	High Tech Kids Cohort Meeting	4		4	10 +adults	C
1/12/21	Skills Development Plan Training from Korn Ferry	6	1.5	8.5	7	C
1/15/21	FTC Fun Night with Crushbots, Designosaurs	3	1.5	4	5	C
	Total @ first qualifying tournament	179		469.25		

Where can you do motivate experiences?

- In Person
  - Tours, schools, charities, libraries, Scout's houses, etc.
    - More ways to make outreach engaging and hands-on
    - Include fun activities such as games or team exercises
- Online
  - Presentations, reviews, meetings with those from around the world
    - Good for certain activities
    - Easier to set up and run
    - Can include people who wouldn't be able to make it in person
- Online with materials delivered
  - Engaging physical activities with pre-delivered materials
    - Don't assume that people already have the materials
    - Problems could occur with mailing and delivery

DON'T FORGET!

- Make plans for sustainability, team identity, team impact, funding, spreading FIRST, as well as helping the team and other teams thrive.
- Document what you do as you progress through the season
- Ask others what you can improve
- Ask anyone if they would like to attend your Motivate events
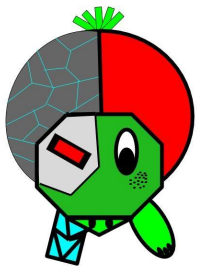- Have fun and encourage others to have fun too!

Thank You!

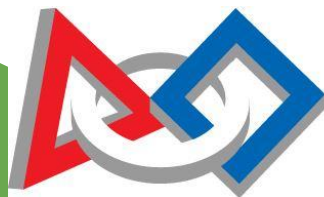If you'd like a copy of these slides or to see our portfolio or notebook, please contact us!

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Twitter: ftctech_turtles

Instagram: tomatoturtles

Questions?