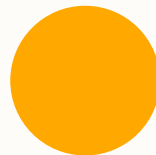




# Impact in a --- Nutshell



*Presented by 2486 The CocoNuts*





# Introductions!

**Rookie Season:** 2008

**Students:** 24

**Team Format:** After school program

**Organization:** Coconino High School (public HS) + homeschool students

**Home:** Flagstaff





**Are any teams applying  
for Impact for the first  
time this season?**





**Who here is an  
Impact presenter?**



**01**



# The Beginning



# Setting Goals



- SMART goals = effective goals
- Set goals with your team to get a feel of everyone's priorities
- Remember to set individual goals as well!
- Center meetings around your goals to get them done on time



REMEMBER THAT ALL WRITTEN  
SUBMISSION ELEMENTS ARE DUE  
**FEBRUARY 12TH @ 3 PM EST**

Video link needs to be submitted  
with essay!



# Goal Examples

## Team:

- Do at least 3 outreach events every semester
- Post regularly on social media

## Personal:

- Try to go to at least 1 regional
- Pay for all season fees with tax credit donations

(if you don't know already, tax credit donations are a thing in Arizona where people can donate \$200-\$400 to a team or a specific member, and they receive credit for it when they file their taxes) (come see us after if you need help setting up!)





# Meeting Scheduling

- Work with your teammates to find the best meeting times for everyone!
- It is important to have consistent meeting times to stay on top of work
- Make sure your meetings are centered around your goals so you actually get them done
- Go to as many meetings as possible (as our coach says, "the more you put in the more you'll get out") but also its okay to take breaks!
- If you can't make it in person for any reason but still want to help out, consider zooming in or just asking what you can work on from home





# Noggin Health



The Season™ is stressful. There no way around it: it's gonna be rough. We have some things that work for us:

- Have healthy snacks
- Drink lots of water
- Communicate with the coaches
- Take breaks
  - Go on a walk
  - DANCE PARTY
  - Stretch
  - Karaoke





**02**



# The Submission



# Eligibility



## ■ First Year Teams

Because the FIRST Impact Award recognizes sustained excellence and impact, not just a 1 year team effort, it is not possible for any first-year team (including rookie teams and new teams that have been assigned a veteran number) to receive the FIRST Impact Award. First year teams will NOT be considered for the award and will not be interviewed.





# Content and Emphasis

- Even though the Impact Award is about “more than robots,” the robots are a useful tool that can be used to impact communities. Teams applying for the award are expected to have a robot that can somewhat fulfill the requirements for the game.
- The criteria for the FIRST Impact Award has special emphasis on recent accomplishments within the last 3 years. The judges focus on teams’ activities over a sustained period, as distinguished from just the robot design and build period.
- Always tell the truth, you don’t want to win an award because you lied. But remember that you want to present everything you’ve done in the best light possible



# Essay



- The Essay is limited to 10,000 characters, including spaces and punctuation.
- The essay portion of the FIRST Impact Award submission provides teams an opportunity to describe their activities and achievements in narrative form.
- While Judges encourage creativity of expression, the essay must clearly deliver information and facts describing what the team is about.
- Teams are encouraged to use some of this space to explain how their team is structured and the number of mentors and students on the team.
- The essay should avoid duplicating information provided in the executive summary questions. However, it is appropriate for the essay to further expand on those responses and provide more in-depth discussion of notable team achievements.
- The most effective essays are characterized by an overview of team activities during the last 3 years, followed by in-depth discussion of notable activities during the most recent 12-18 months. Judges use the essay to get a big picture view of the team and to learn about achievements that may be unique and noteworthy.



We are 2486 The CocoNuts from Flagstaff, AZ. Our mission has always been to make STEM programs accessible to all. Innumerable barriers make fulfilling this mission...HARD. But with resiliency, reliability, dedication, passion, and enthusiasm, the Nuts have found that we CAN do hard things.



Our small town is nestled in mountains at 7000' on sacred ancestral indigenous lands, and is 2.5 hrs from the closest metropolitan area. FUSD students are over 70% minority and 7 of our 11 elementary schools are Title 1. Flagstaff is described as "poverty with a view," but by contrast it's also called "America's 1st STEM City."

Flagstaff prides itself on STEM programs, but we've personally seen that not everyone has the same access; the majority of Nuts come from Title 1 schools, and have experienced barriers due to ethnicity, gender, or income. We created the "También Lo Puedo Hacer (I Can Do It Too)" STEM fair at Killip, our low-income high-minority neighborhood elementary school, to demonstrate to young people that STEM is for everyone. "Tambien" has now been operating for 3 yrs; 31 diverse organizations, such as the Native American Ed Support Program and the Navajo Dept of Energy have participated. 400 students have had the chance to explore new potential. Killip Principal Gutierrez said, "On behalf of our students and families, THANK YOU! This event is complementary to our vision and goals. The community support is so greatly appreciated. You are AWESOME!" We are changing the narrative from "I can't" to "I CAN."

Many schools struggle to create STEM programs, so we created FLL in a Nutshell, which teaches new coaches strategies for running successful teams. Our partnership with NAU allows us to offer Professional Development hours for any teacher participating in Nutshell or workshops at FTC Kickoff. FUSD pays stipends to participating teachers. These teams have won the Lunar Legacy Invitational and 3rd place Champion's at the AZFLL Championship!





# Executive Summaries

- Each executive summary is limited to 500 characters, including spaces and punctuation (with an exception of the last question).
- There are 14 questions and 4 categories each question fits into:
  - Impact on students
  - Impact on community
  - Partnerships
  - Outreach
- To give as much information as possible, you shouldn't repeat any content within the summaries, so you can assign each question a topic



# Executive Summaries



- Describe the impact of the *FIRST* program on team participants within the last 3 years. Think about percentages of those graduating high school, attending college, in STEM careers, leadership skills, and serving as mentors/sponsors in *FIRST* programs.
- Describe your community along with its unique opportunities and circumstances. Think about your geographic region, diversity of town/school, language barriers, socioeconomic barriers, and cultural expectations.
- Describe the team's methods, with emphasis on the past 3 years, for spreading the *FIRST Mission* in ways that are effective, scalable, sustainable, and creative.
- Describe your team's goals and the progress you have made towards them to fulfill *FIRST's Vision*.
- What impact has your team seen from your efforts described in the above question? How does your team measure impact?
- Please provide specific examples of how your team and team members act as role models for the *FIRST* community with emphasis on the past 3 years. How do you share these best practices with other teams?



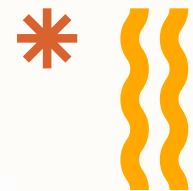


# Executive Summaries



- Describe your team's initiatives to Mentor and/or Start other *FIRST* teams with emphasis on activities within the past 3 years.
- What other initiatives have you created, grown, sustained, or participated in (*FIRST* or otherwise) to help inspire young people to be science and technology leaders and innovators? What outcomes have you seen from your efforts in the past 3 years?
- Describe the partnerships and relationships that you've created with other organizations (teams, sponsors, educational institutions, government, philanthropic entities, etc.) and what you have accomplished together, with emphasis on the past 3 years.
- Describe your team's efforts in the past 3 years to promote STEM for Everyone™ within your team, *FIRST*, and your communities.
- Explain how you ensure your team and the initiatives you have created will be sustainable.
- Highlight one area in which your team needs to improve and describe the steps actively being taken to make those improvements.





# Executive Summaries

- Briefly describe other matters of interest to the *FIRST* Judges, including items that may not fit into the above topics. The judges are interested in learning about aspects of your team that may be unique, particularly noteworthy or had a large impact.
- (OPTIONAL - limited to 250 characters including spaces and punctuation) Please use this space to ask 1 question to your *FIRST* Impact Award Judges which will be answered after each event with feedback from the judges.

To help teams who may be unsure of what question to put in the optional feedback question, we have compiled a few options that teams may choose from:

- Is there something more that we can do to improve our presentation?
- Is there anything missing from our submitted materials?
- Which outreach activity do you feel we execute most effectively?



**Describe the impact of the *FIRST* program on team participants within the last 3 years. This can include but is not limited to percentages of those graduating high school, attending college, in STEM careers, and in *FIRST* programs as mentors/sponsors.**

Being a CocoNut changes lives! FIRST led Nuts to internships at JPL, TGen, NAU labs, and SASA. In the last 3 years, AlumNuts have been offered \$3+ million in scholarships to NAU, UA, ASU, Columbia, EmbryRiddle, UCSD and UNM. Our graduation/college acceptance rate is 100% compared to grad rates of 83% (CHS), 75% (AZ) and 60% (the Rez). 1/3 of AlumNuts are 1st generation college students. 95% of Nuts are in STEM fields. We have 14 Dean's List Finalists. 1/3 of AlumNuts stay in FIRST as volunteers.

**Describe your community along with how your team addresses its unique opportunities and circumstances.**

Flagstaff is a STEM City and a small university town but by contrast, only 53% of the population has a four-year degree. There is a plethora of STEM programs available, but not everyone has equal access. In schools on the adjacent Navajo Nation, there is little STEM encouragement, programs or teachers with expertise. We go the distance to develop new STEM programs in areas of high need across AZ, with emphasis on our forgotten indigenous communities. This is our home, our Family.

**Describe the team's methods, with emphasis on the past 3 years, for spreading the FIRST message in ways that are effective, scalable, sustainable, and creative. How does your team measure results?**

We've been in the media 30+ times in 3 yrs. Our Junkyard Robots Challenge develops critical thinking and perseverance. We created 2 STEM fairs that cater to the special challenges of underprivileged groups. We've done 100+ outreach events, workshops and presentations in 3 yrs reaching over 47,000 in person. To sustain our efforts, we've created written instructions on STEM activities, how to recruit and retain partner organizations, and mentored apprentice Nuts to take the lead in future years.





# Presentation

- FIRST Impact Award interviews are limited to 12 minutes total; up to 7 minutes for a presentation by the team (which includes set-up) and the remaining time (5 minutes) is for question and answers led by the judges.
- If teams use less time than 7 minutes for their presentation, judges may use the remaining minutes (out of 12) for Q and A. To ensure consistency, it is very important that all interviews are no longer than 12 minutes.
- No more than 3 student (pre-college) team members are allowed to present information or answer questions from the Judges.
- One adult Team Mentor may attend the interview as a silent observer and later provide feedback to the team, but the mentor is not allowed to provide any assistance during the interview.





# Video

## Content Guidelines:

- Show them what you are doing to earn the FIRST Impact Award
- Do not identify minors by full name, use only first names.

The Video format is as follows:

- A 16:9 ("widescreen aspect ratio")
- Not more than 3 minutes long, no shorter than 1 minute long.
- Include a clean audio track
- Free of copyright restrictions, including music.
- The video must be hosted on one of these three (3) file sharing sites (Dropbox, Box, and Google Drive) and be made public to allow video downloads.

# Video



- Video footage
- Voice over/music over still photographs
- Animated presentation
- PowerPoint converted to VIDEO format

Sound:

- Should be clear of pops and hisses

Copyright:

- If using copyrighted music must have written permission
- If using Creative Commons Music (CCM) online, the music must be used in accordance with the appropriate license and properly attributed.
- Music may not contain offensive or suggestive language

# + Documentation

Documenting and preserving your team's FIRST experience becomes an important component of the overall FIRST experience.

Integrity is a core FIRST value, don't make up anything.

Don't make anything up!

Team Name: \_\_\_\_\_  
Team Number: \_\_\_\_\_



## FIRST Impact Award Documentation Form

### How to use this form

- In the chart, list all teams/events/items that you have documentation for. Please refer to the [Official FIRST Impact Award Definitions](#) for more information on the required/recommended documentation types.
- Label each piece of documentation with a "documentation ID". Attach the pieces of documentation to this form, in order of Documentation ID, and be sure to label each with its document id.
- **Please only turn in documentation for activities within the past 3-5 years.**

| Team Number or Type of Activity & Location<br>(i.e. FIRST Lego League Team 9999 or 2019 District Event - Salem, MA) | Date of Activity<br>(i.e. Fall 2022) | Choose one of the <a href="#">Official FIRST Impact Award Definitions</a> : | Type of Documentation<br>(letter, screenshot, photo, thank you card, etc) | Documentation ID<br>(use numerical numbers i.e. ID-001) |
|---|--------------------------------------|---|---|---|
|   |                                      |   |   |   |
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\* Teams can use as many sheets as they need but all should have team name & number.





**03**

# The Grind







# How to Essay

- Multiple drafts
  - Have each new draft done every two weeks (we've found that 4 drafts is the golden number but it's different for every team!)
- Write everything that you want/can and then cut away to make writing more concise and only keep what you really need
- Have multiple people writing and multiple editors (different perspective readers)
- Use a theme



# How to Executive Summary



- Be as concise as possible and don't worry about making it sound pretty
- Use statistics and numbers!
- Use the 4 categories





# How to Presentation

We'll talk about the actual in person interview in a bit, but here's how to prepare!

- Make multiple drafts
- Write it like a script
- Use your own words and make it sound natural
- Time Your practices (must be no more than 7 minutes)
- Practice, practice, practice
- Know how to efficiently answer questions (there's only 5 minutes)



# Solving Disputes



All of you are hardworking, intelligent people who have great ideas. But sometimes it can be difficult to work with others who are also intelligent and have lots of ideas.

- Write everyone's ideas down
- Communicate respectfully
- Take breaks
- Have compassion



# Teams and Work Division



- On our team each person focuses on a specific part of the submission. Last year, we had one person as the video head, the presentation team working on the presentation, and everyone else worked on the essay, doing the executive summaries once the essay was in its final stages.
- The most important thing is that every person has a manageable workload. Make sure that the members of your team all feel comfortable enough to reach out if they have too much on their plates, or if something comes up in their life.



# How to Stand Out



FIRST, as you all know, is very competitive, here are some tips and tricks on how to stand out, and make a mark!

- Do outreach and community work. FIRST is all about STEM, the more real change you make in your community, in any way you can, is a great way to *impact* your judges
- Make connections! The more you interact with the people around you the more they will remember you
- When at competitions don't be afraid to cheer! Not only for your team but for others too! Gracious professionalism can do no harm:)
- Don't only do good things because you are trying to win an award





# Define your Community

## Northern Arizona

### Area, 3 counties:

27,500 sq.mi (~WV)

### Population:

Coconino County: 144,000

Navajo Nation is in AZ, UT, NM



### Unique Challenges:

- Navajo Nation "The Rez" and Education
- #48 for Education Funding
- VAST Distances: Some Rez teams are ~3 hrs from Home Depot!





# Create Initiatives

- RezBotics
- Program Delivery Organization for AZFTC
- Arizona Advocacy Conference
- FLL In a Nutshell
- Dine' People are the Future STEAM Fair
- Lunar Legacy







# Rezbotics



- We created Rezbotics in the fall of 2023
- The purpose of RezBotics is to bring STEM education to rural Northern Arizona and the Diné Reservation.
  - Many people on the reservation don't have access to any STEM involvement. So instead of making them leave their homes and drive hours to have access to STEM, we partnered with NTECH (The Navajo Transitional Energy Company) so that they are able to have opportunities brought to them.
  - The lack of STEM champions and education on the Rez was an issue that was personal to many of us. With RezBotics, kids are able to create opportunities for themselves that they never thought they could before. RezBotics helps to inspire kids on the reservation to continue learning and to build their own futures because not everyone has role models.





# Issues We Faced and How We Overcame Them

- Communication
  - Distance
  - Fear of Failure/Mistrust
- Created communication network between all coaches and our team so they could ask for help whenever they needed
- We would communicate to see where the best place to have events would be so it was accessible to as many people as possible
- There is a cycle of discouragement in many underserved communities. We made sure to emphasise that winning or losing wasn't the point, but showing up and trying was





**04.**

# Competition



# The Impact Interview



This can be the most nerve wracking part so we have some advice:

- Our team has a fun tradition of cheering on the presentation team before the interview
- If you blank for any reason during the presentation, don't hang on it! It's okay to let your teammates help you or to just transition to the info you know. (You can always throw in more information during the Q&A)
- A good way to know you're ready is if you're reciting the presentation in your sleep 😊
- Remember that it's okay if you mess up, the judges know that you're human





# Pit Interviews

- What do pit interviews have to do with this though? They can make a world of a difference!

When we went to worlds two years ago we didn't do the best on our impact interview but decided put our all into our pit interviews. After a starbucks run and some bedazzled safety glasses, we had an amazing pit interview were awarded the Engineering Inspiration award for the Dally division.

\*Additionally, how your team acts outside of the judging room matters! Show kindness, enthusiasm, and professionalism in all that you do with FIRST!



**The End!**



# Q&A

