How to Put Together Great FLL Research Presentations

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Legal Stuff

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Credits

This class material is put together by Beth Whillock, 5th year LEGO League coach and Karen Vaughn, 5th year presentation coach for the Moundsview School District, Minnesota.

Introduction

- **Each team is responsible for researching and developing the current year's team project and then doing a presentation explaining their solution.**

- **This training is designed to help coaches prepare their team for the presentation portion of the FLL tournament and will cover basics in:**
  - Choosing a topic and format
  - How to research the topic
  - Preparation and tournament hints

Roles

- **The presentation should be researched and prepared by the team itself. The role of the coach is to empower the team and act as a facilitator to guide them and help with team building, negotiation and conflict resolution.**

- **If team members are reluctant to work on the presentation:**
    - **Make it clear up front that everyone is expected to contribute**
    - **Outline a timeline to show when everyone is working on different tasks, taking turns on the presentation**
    - **Use desired activities (building, programming) as rewards for completing research tasks**

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Why is the Presentation Important?

- **It gives the team opportunities to develop and demonstrate skills in:**
  - Organization
  - Research
  - Writing
  - Public speaking
  - Creativity
  - Teamwork
  - Responsive thinking

Topic

- **The topic for the presentation changes each year and relates to the Challenge for the year.**
    - **Some years are easier than others, Last year, relating to the challenge was easy, this year there may not be a connection between the missions on the table & the presentation topic.**
- **The team will need to narrow the general topic down to a specific question they will be answering in the presentation.**
    - **Hint: Make sure everyone is clear on the focus question for the team's research as this is often a judging question.**

Research Approaches

- **General background research of the topic is necessary as well as specific research on the question the team will answer.**
    - For instance, if the selected topic is ice cores on Mars, the team should know something about Mars in general as well as ice coring technologies.
- **Everyone should be involved in the research. Divide & conquer!**
- **The more varied sources of research the better.**
- **Have team members share particularly interesting or topical research with the group.**
- **Do a topic "ice breaker" to get the team interested – field trip, video, talk by an expert.**

Sources For Research

- **Internet**
- **Books**
- **Magazines**
- **Interviews with "experts"**
  - Ask for parental input if they know an expert that the team can interview.
- **Field trips**
- **Yellow Pages**

Format General Requirements

- **The maximum length of the presentation is 5 minutes. This equates to about 2-3 pages of typewritten script. This is followed by 10 minutes of questioning by the judges.**

- **The presentation should include background information on the overall topic and information on their problem, solution and how they shared what they have learned.**

- **It is best if all team members participate.**

- **All props and materials (e.g., costumes, signs, handouts, videos) should be made by the team members.**

- **Choose a format that is exciting to the team!**

- **Newscast**
  - **Easy way to convey facts, hard to find roles for everyone**
- **Game Show**
  - **Good for energetic teams, tough to spread the roles**
- **Skit**
  - **Greatest creative latitude, tough to get in to 5 minutes**
- **Rap/Song**
  - **Very creative, need outgoing kids, script development tricky**
- **Written Speech**
  - **Easy to present, can be dry**
- **Create a website**
- **Make a comic book**
- **Create a poster**

Note that stand-alone powerpoints are not allowed. You must have a live presentation.

- **Your team needs to brainstorm about potential project topics. They may want to do a little research on each topic of interest and make presentations to each other to help decide on the final topic question – this makes a good early homework assignment.**

- **After the topic question is settled, take into consideration the team's personality. For example, a more serious-minded team may not want to perform a comedic skit.**

- **Discuss what formats the team would be interested in developing.**
  - **Combine or compromise until a final format is chosen**.

- **Coaches – explore an "ice breaker" activity to introduce the topic.**

Putting It Together

- **Team should list the facts they want to present to the judges that will help to answer the topic question.**

- **Using the selected format, the team should then assemble the facts into a logical presentation.**

- **Have the team decide what presentation role each member will take.**

- **Let the kids get creative, even silly ideas can be worked in.**
    - **Santa in the Arctic**

Support Pieces

- **Props and costumes help bring "ambience" to the presentation.**
  - **Kids can use creativity & gain ownership in the presentation by developing their own props**

- **A scrapbook is a good way to summarize the team's research as well as show how the team worked together.**
  - **Photographer & scrapbook organizer are good specialty roles**

- **Best if everyone on the team has a part.**

- **If a song or rap is done, supply the judges with the script.**

Teamwork Hints

- **Go over the general research as a group so everyone can answer questions.**
    - **Hint: This can be done as a team by holding a trivia contest or test.**

- **If the research is divided amongst the team, remind everyone that they have team "experts" in certain areas.**

- **Encourage participation by making one of your team tournament goals be to have everyone answer at least one question in judging.**

- **Find special roles for unique team individuals:**
    - **Roles that move for active members (earthquake)**
    - **Photographer for members that want their own project**
    - **Sign holder for shy members**

Final Preparations

- **Conduct rehearsals of the presentation before the tournament.**

- **Include a "mock judging" so the kids are used to answering an adult's questions.**

- **Make sure everyone has their props and skits ready to go.**
  - **You may opt to collect them prior to the tournament to make sure all the props get there.**

- **Spectators are welcome as long as they do not disrupt the presentation.**

- **Wait outside the door until the room monitor tells the team they can enter.**

- **Talk to the team about how to enter the room and set up for the presentation.**

- **Usually the team faces the judges and the audience. The judges are usually seated together at a table.**
  - **The team needs to wait for the judges to tell them to start.**

- **What is the problem the team is addressing?**
- **How did the team select the solution?**
- **How did the team do the research?**
- **How did the team select the format?**
- **How did the team use teamwork?**
- **If the team didn't agree on something, how did they solve the conflict?**

- **Encourage everyone to answer questions. Make a team goal that everyone answers at least one question in the tournament.**

Tournament General Info

- **Gather all the props together after doing the presentation – the team may get a call-back (State Tournament.**

- **Name tags for the team members can be useful for helping the judges address the team.**

Conclusion

- **Research Project is an important element in the team's overall scoring.**

- **Focuse on a specific problem and solution.**

- **Research of the topic is important. Numerous reference sources should be used! Not just the internet.**

- **Presentation format should reflect the team's personality.**

- **Participation by the whole team is advantageous.**

- **Encourage your team to have fun!**

- **Chicks in Space – Mars Challenge**
  - **Experienced 7th grade team of 8 girls. Comfortable with presenting, witty.**

  - **Topic Selection: divided up and read project descriptions, chose 3-4 of interest. Did more in-depth research on chosen areas (divide & conquer). Presented findings to team. Met to come up with consensus on the topic. Ended up combining 2 questions into one topic. Wrote problem statement as a team. "What can ice cores on Mars tell us and will we find signs of life in the ice cores".**

- **Format: Brainstormed ideas. Converged on a nature show format. Decided to insert comedy because they enjoy that.**
  - Silly ideas were allowed in brainstorming process

- **Script Development: ended up with more material than was needed. Subgroup drafted the script but entire group had edit privileges. Individual characters fine tuned their roles.**

- **Specific Research: Used a lot of parent connections. E-mailed biologists at the U of MN, geologist came to a meeting. Also used internet, magazine & TV as sources (JPL website, NASA TV)**

- **Dead Batteries – City Sights**
  - **Group of 7 energetic boys, did not want to do the presentation. Had mostly extroverts. Very Loud.**
  - **Topic Selection: divided up cities and did very general research on problems in each. Presented this to the group. Team discussed what interested them and voted on Singapore.**
  - **Format: Key members wanted to do a rap and convinced the team to try it. All liked this music form. Divided up the parts of the presentation, each character took on section of the research: history, problems, solution, maintenance. Each member drafted their verse, sub-team edited script to final.**