# Advancement Percentages

When planning their tournament structure, FLL has the following *recommendations* for the number of teams to advance:

- 10% is the minimum percentage of teams that should advance
- Around 30% is the recommended percentage of teams to advance
- 50% is the maximum percentage of teams that should advance

Taking into account FLL recommendations for advancement percentages, the FLL Partner for each region will determine the percentage of teams that will advance for each event. To determine how many teams will advance, multiply the advancement percentage by the total number of teams at the event. Round to the nearest whole number to find the number of teams advancing.

Number of teams advancing = (Advancement %) \* (total number of teams at event)

**Example:** A qualifying tournament has space for 12 teams to attend. Starting with an approximately 30% of teams advancing times 12 teams gives 3.6 teams advancing. Rounding up, 4 teams will advance from this event to the next level. The advancement percentage for this event is 4/12 = 33%.

#### **Team Eligibility for Advancement**

Teams are eligible for advancement if they meet the following criteria as *required* by the FLL Global Standards and Challenge document. Teams must:

- Have between 2 and 10 members
- Complete all required sections of the Project
- Have no disqualifying (Red-level) Core Values behaviors
- Be competing at their first official FLL event of each qualifying level during the season
- Perform well in all three judged areas (Core Values, Project, and Robot Design)
- Meet the minimum Robot Performance hurdle percentage for advancement

### **Calculating Robot Performance Advancement Hurdles**

The FLL Qualifier Advancement Policy is based on the Champion's Award criteria. The judges at each FLL tournament have the difficult job of determining which teams will advance to the next level.

Teams advancing must meet a minimum "hurdle" percentage in robot game scores in order to advance. FLL Partners are *required* to use the following procedure to determine the Robot Game hurdle percentage for advancement:

Advancement %	Hurdle %
≤ 20	40
25	48
30	55
35	62
40	67
45	72
50	75

- 1. Calculate the percentage of teams advancing from each event.
- 2. Round your advancement percentage to the nearest 5. (Follow standard rounding rules.)
- 3. Locate the rounded advancement percentage in the table.
- 4. Announce the Robot Performance hurdle percentage for advancement to teams before the event.

For tournaments advancing more than 50% of teams, the Robot Performance hurdle percentage for advancement is 75%. FLL Partners must consult with their Partner Services Manager if they wish to use larger Robot Performance hurdle percentage for advancement.

**Example:** 33% of teams are advancing from an event. Round 33% up to 35% and consult the table. The advancement hurdle is 62% for this event. If 12 teams are attending the event,  $12 \times 62\% = 7.44$  teams. Rounding down to 7 teams means that teams must be in the top 7 scores to be eligible to advance.

## **Advanced Notice of Robot Performance Advancement Hurdles**

FLL Partners are *required* to determine the advancement hurdle in advance of each tournament using the table. Further, FLL Partners are *required* to announce the advancement hurdle to teams before the tournament. Ideally, the event announcement would include the percentage of teams advancing and the Robot Performance Advancement Hurdle.

**Example:** "There are spaces for 12 teams at this qualifying tournament. The judges will select four teams to advance to the Championship, using the Champions Award criteria. Teams must be in the top 62% of Robot Game scores to be considered for advancement."

The Robot Performance Advancement Hurdle may *not* be changed during deliberations or any other time during the tournament day. The hurdle is considered a fixed barrier that teams must meet or exceed to be considered for Champions Award. This procedure ensures that all teams know the policy and it is applied consistently for all teams and all tournaments.

## **Champions Award Robot Performance Hurdle**

The Robot Performance Hurdle for advancement does not impact the hurdle for Champions Awards. **Teams at all tournaments must be in the top 40%** of Robot Game Scores to be considered **for Champions Awards**.