

A Coach's Perspective

FIRST[®] LEGO[®] League Jr

Survival tips for the first year coach

Talking Knowledge™
Glenn E. Ruby - 2018

Manage the Opportunity

The Team Meeting Guide presents ...

- A well defined program comprised of 12 straightforward one hour sessions
- Pointers to a wealth of knowledge and guidance – multimedia resources, educational resources, and parts / build documentation

Its everything you need – just add a LEGO kit and 3 to 6 children – right?

An over-the-top educational opportunity

- Unpacking the detail for any given session reveals that each one deserves 2-3 times the allotted hour

You can't do it all –

Choose content that will engage and motivate your team into action.

Begin at the End

FLL Jr Challenge Expo deliverables

- A physical model demonstrating one or more simple machines under computer control
- A story board documenting the journey toward that achievement
- A team of communicators to tell the story of what they did, why and how they did it, and what they learned along the way

Focus early on sessions 8 through 12

Highlight progress toward the end goal – as you go

- Content for the story board
- Stories for talking points

Reinforce learning moments & ease the burden of final preparations

Be Ready to Move

Plan for storage and transport

- Any LEGO element from any source can be used in the Challenge model
It won't be long before they are mixed up and scattered everywhere.

Protect your masterpieces

- LEGO builds are generally only as stable as what they are supported by
- Intentional and unintentional movement is inevitable, requiring rework
The lure of the LEGO brick is irresistible – “accidents” will happen.

Transporting the Challenge build

- 30" X 15" maximum foot print – 2 LEGO Classic gray baseplates (10701)
- A stiff platform is needed to keep the baseplates rigid.
- 32" x 18" x 8" kraft shipping box costs less than \$5 and is a perfect container solution.

The Big Picture

Promoting critical thinking from a STEM perspective

- STEM is a mindset –a methodology for thought and learning
- The engineering process
 - Identify a problem and work toward a solution
 - Trial and error is part of the process
 - Success does not come without failure – and that’s okay

Building the mindset with children through discovery

- STEM is everywhere –you can apply the thought process to anything.

What is that? What’s important to know about it? What can I do with it? How does it work? How can I make it work? How did someone create that? What tools and process or method did they use? Can I do that? Can I make it better? Can I apply that to something else?

Expect the Unexpected

- **Schedule meeting days / times / durations –stick to it**
- **Take breaks when they are needed, not by the clock**
- **Expect to accomplish only half of meeting goals**
- **The children are your biggest challenge**
 - Understand their learning traits
 - Manage ever-changing combinations of personality, mood, energy level and focus
- **Don't be afraid to ask others to pitch in as needed**

When you are doing your best to engage the children, to motivate them into action, and to control disruptions, you are doing your job.

The Power of Brainstorming

- Lead a conversation based on what actions or ideas you would like your team to explore
- Solicit their input – let them take over the conversation
- Transition from telling them what to do to a role of encouragement and support as they act on their own ideas – let the magic happen

You can also apply this technique to review prior activities and/or next steps. And it is a great way to bring in some of that extra, yet relevant, material that time constraints forced you to skip.

Arm Your Communications Team

- **Prepare to share**
 - **Help them to remember everything they did**
 - What their model demonstrates, how their program works, what they explored, what they learned, etc.
 - **Capture a brief set of high level notes**
- **Success comes in the story they tell together**
 - **Demonstrates effort and teamwork**
 - **Validates authentic learning**

Expo Day Logistics

- **Bring snacks**
 - It's a long morning
- **Bring charged up tablets, extra model batteries**
- **Set your team up at the assigned table**
 - The children are the show – you are done
- **Team evaluations**
 - ~10 different judges evaluate each team in ~10 categories
 - Last year that process took ~ 75 minutes in total – a lot of waiting around.
 - The event concluded with a ~15 minute award ceremony
- **Play time**
 - Time to relax out in the courtyard – weather permitting

Award Opportunities

Model awards

- Sturdiness, beautiful construction, amazing movement, knowledge of the model/challenge

Poster / research awards

- Artistic prowess, a well documented journey

Core values awards

- Gracious professionalism, rising stars, effort and learning, cooperation rocks

Age appropriate achievements, effort, and authentic learning are rewarded. Overproduced posters, models, and notebooks that look like coaches / parents had too much influence on do not gain any advantage.

One More Thing

Celebrate and share

- This is a great accomplishment for participating children
- Celebrate with them
- Have them share their experience with others

***Thank you for making the commitment to the children
through this program.***

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