

1

00:00:00,000 --> 00:00:05,640

Hi, my name is Milo.

2

00:00:05,640 --> 00:00:06,640

I'm Isabelle.

3

00:00:06,640 --> 00:00:09,640

We're both seventh graders.

4

00:00:09,640 --> 00:00:12,960

And you're listening to the SM Way podcast.

5

00:00:12,960 --> 00:00:14,600

Welcome to the SM Way podcast.

6

00:00:14,600 --> 00:00:16,440

I'm your host, Daniel Bader.

7

00:00:16,440 --> 00:00:20,360

Today we're talking about one of the newest student activities in South Milwaukee, First

8

00:00:20,360 --> 00:00:21,360

Lego League.

9

00:00:21,360 --> 00:00:25,880

If you're not aware of what it is, it's more than bricks and Lego figures, though those

10

00:00:25,880 --> 00:00:27,880

are certainly part of it.

11

00:00:27,880 --> 00:00:31,120

As a suggestion of a parent who wanted his daughter to be involved in some sort of a

12

00:00:31,120 --> 00:00:36,440

robotics club, South Milwaukee Middle School started up two First Lego League teams as

13

00:00:36,440 --> 00:00:38,720

an after school activity.

14

00:00:38,720 --> 00:00:42,960

Today on the podcast, we hear from two of those students and their coach and what that

15

00:00:42,960 --> 00:00:49,000

experience has taught each of them.

16

00:00:49,000 --> 00:00:55,140

So joining us today on the podcast are two of the students, one from each of those teams

17

00:00:55,140 --> 00:01:01,080

and their teacher, Mrs. Julie Barnett, who is the coach.

18

00:01:01,080 --> 00:01:02,400

Am I saying that right?

19

00:01:02,400 --> 00:01:06,200

Coach, coach, the coach of both Lego League teams.

20

00:01:06,200 --> 00:01:07,200

We'll start with Isabelle.

21

00:01:07,200 --> 00:01:12,720

Isabelle, tell me the name of your First Lego League team.

22

00:01:12,720 --> 00:01:15,600

My Lego League team was Every Day We Rocket.

23

00:01:15,600 --> 00:01:16,600

Nice.

24

00:01:16,600 --> 00:01:18,200

I love the pun in there.

25

00:01:18,200 --> 00:01:20,560

And Milo, tell me yours.

26

00:01:20,560 --> 00:01:22,680

My team was Rocket Power.

27

00:01:22,680 --> 00:01:28,520

Milo, since the mic's still pointing at you, what is First Lego League?

28

00:01:28,520 --> 00:01:29,520

What is it?

29

00:01:29,520 --> 00:01:32,520

A very fun experience.

30

00:01:32,520 --> 00:01:34,240

That's the way I can explain it.

31

00:01:34,240 --> 00:01:35,720

But what do you do?

32

00:01:35,720 --> 00:01:38,880

You're using Legos, but how?

33

00:01:38,880 --> 00:01:41,080

How do you use them?

34

00:01:41,080 --> 00:01:49,760

To build complicated-ish robots to complete tasks in an efficient manner.

35

00:01:49,760 --> 00:01:54,800

Isabelle, how do you build a robot out of Legos?

36

00:01:54,800 --> 00:01:56,040

Mine never move.

37

00:01:56,040 --> 00:02:00,800

Well, it starts as a base, as an electronic base, and you build the Legos around it because

38

00:02:00,800 --> 00:02:04,200

it has ways to connect the Legos to it.

39

00:02:04,200 --> 00:02:08,040

And once you do that, you can create attachments for it to help it move around.

40

00:02:08,040 --> 00:02:12,320

And with motors, you can actually make it move up and down or side to side.

41

00:02:12,320 --> 00:02:13,600

And there are tasks, right?

42

00:02:13,600 --> 00:02:17,480

You have to accomplish something on a game board, I guess.

43

00:02:17,480 --> 00:02:18,480

Is that right?

44

00:02:18,480 --> 00:02:19,480

Yeah.

45

00:02:19,480 --> 00:02:23,640

Tell me an example of maybe one of your tasks.

46

00:02:23,640 --> 00:02:25,480

One of them is the light show.

47

00:02:25,480 --> 00:02:27,960

It was where you have to lift it up.

48

00:02:27,960 --> 00:02:33,280

You have to lift a bar up to a certain color if you want the maximum amount of points.

49

00:02:33,280 --> 00:02:35,440

So it's a large tower.

50

00:02:35,440 --> 00:02:36,440

Well, not large.

51

00:02:36,440 --> 00:02:37,440

It's large for Legos.

52

00:02:37,440 --> 00:02:43,880

But a large tower, and you would have to have the robot lift it up to the color in the middle

53

00:02:43,880 --> 00:02:48,560

because it was the smallest color and it was still pretty high on the thing.

54

00:02:48,560 --> 00:02:50,280

So it was really complicated.

55

00:02:50,280 --> 00:02:51,280

Got it.

56

00:02:51,280 --> 00:02:53,080

And Milo, did you have to program?

57

00:02:53,080 --> 00:02:54,080

Do you program those robots?

58

00:02:54,080 --> 00:02:55,320

How does it work?

59

00:02:55,320 --> 00:03:00,840

I wasn't one of the programmers, but there is a programming app that we use to do it.

60

00:03:00,840 --> 00:03:01,840

What would be an example?

61

00:03:01,840 --> 00:03:05,400

How would you, even though you didn't do it, do you know the concept of how you would have

62

00:03:05,400 --> 00:03:06,400

to program it?

63

00:03:06,400 --> 00:03:13,520

It was block coding where the boxes would have, and I'm going to do it from what we

64

00:03:13,520 --> 00:03:16,560

see and from what I believe the computer sees.

65

00:03:16,560 --> 00:03:22,080

But we would see a box with instructions in it and other things like that.

66

00:03:22,080 --> 00:03:27,600

So it would be like move X number of blocks forward that kind of way, and then I guess

67

00:03:27,600 --> 00:03:33,280

– and then it's like move it up three blocks and you would have to kind of gauge whether

68

00:03:33,280 --> 00:03:35,080

that – is that how it works?

69

00:03:35,080 --> 00:03:39,400

You can make it like inches and rotations and all that.

70

00:03:39,400 --> 00:03:46,920

But what the computer would see would be ones and zeros that would make the instructions.

71

00:03:46,920 --> 00:03:47,920

Yeah.

72

00:03:47,920 --> 00:03:48,920

Okay.

73

00:03:48,920 --> 00:03:49,920

I get it.

74

00:03:49,920 --> 00:03:55,160

So the app was kind of your interface with the computer.

75

00:03:55,160 --> 00:03:57,440

And tell me about the teamwork.

76

00:03:57,440 --> 00:04:00,560

How many people are on each of your teams?

77

00:04:00,560 --> 00:04:03,560

Anybody can answer.

78

00:04:03,560 --> 00:04:07,760

And how do you work together to do that?

79

00:04:07,760 --> 00:04:10,960

Well, we would kind of split up into different groups.

80

00:04:10,960 --> 00:04:15,400

The people who build would build different attachments depending on what the robot couldn't

81

00:04:15,400 --> 00:04:18,680

do or needed to help.

82

00:04:18,680 --> 00:04:22,400

Other people were coding while this was happening, and other people were there trying to problem

83

00:04:22,400 --> 00:04:23,960

solve.

84

00:04:23,960 --> 00:04:27,960

On a team, I think there was about six to seven-ish each.

85

00:04:27,960 --> 00:04:28,960

Yeah.

86

00:04:28,960 --> 00:04:30,680

And how do you assign tasks?

87

00:04:30,680 --> 00:04:33,240

Do you volunteer or what was it?

88

00:04:33,240 --> 00:04:38,800

So in the beginning when we started, we started learning the fundamentals about it.

89

00:04:38,800 --> 00:04:43,640

And depending on what you were good at about that, like if you were really good at the

90

00:04:43,640 --> 00:04:49,380

building but you weren't so good at coding, you could be a builder if you wanted to.

91

00:04:49,380 --> 00:04:54,520

If you were good at both and were open to strategizing and problem solving, you would

92

00:04:54,520 --> 00:04:55,520

do that.

93

00:04:55,520 --> 00:04:59,480

Or if you were pretty good at coding and your team agreed and you wanted to, you would also

94

00:04:59,480 --> 00:05:00,480

code.

95

00:05:00,480 --> 00:05:04,440

So it was kind of a democracy, you just kind of jumped in where you felt like you wanted

96

00:05:04,440 --> 00:05:05,440

to help?

97

00:05:05,440 --> 00:05:06,440

Yeah.

98

00:05:06,440 --> 00:05:07,440

Yeah.

99

00:05:07,440 --> 00:05:12,080

Milo, what got you into, and this is extracurricular, you do it after school.

100

00:05:12,080 --> 00:05:15,000

What made you interested in this?

101

00:05:15,000 --> 00:05:21,520

I thought of two things, or more than two.

102

00:05:21,520 --> 00:05:27,320

Being with my friends and with the idea that I get to problem solve.

103

00:05:27,320 --> 00:05:28,320

Yeah.

104

00:05:28,320 --> 00:05:32,080

Is there something that interests you?

105

00:05:32,080 --> 00:05:34,560

It was intriguing about this, do you do Legos at home?

106

00:05:34,560 --> 00:05:35,560

Yes.

107

00:05:35,560 --> 00:05:36,960

So is the Lego thing too?

108

00:05:36,960 --> 00:05:37,960

Yeah.

109

00:05:37,960 --> 00:05:38,960

Is that part of it?

110

00:05:38,960 --> 00:05:45,720

At least I know from my dad to me to my brother, we all just like to problem solve.

111

00:05:45,720 --> 00:05:46,720

Nice.

112

00:05:46,720 --> 00:05:48,120

How about you, Isabel?

113

00:05:48,120 --> 00:05:53,080

What brought you to the Lego League?

114

00:05:53,080 --> 00:05:55,440

I always thought Legos were really fun.

115

00:05:55,440 --> 00:05:57,800

I enjoyed building the sets.

116

00:05:57,800 --> 00:05:59,680

I thought I was good at them.

117

00:05:59,680 --> 00:06:02,080

And then I also liked coding.

118

00:06:02,080 --> 00:06:06,920

So when I found out it was about coding too, I was really excited because coding is really

119

00:06:06,920 --> 00:06:11,840

fun and there's a lot of things you can do just with a singular block.

120

00:06:11,840 --> 00:06:12,840

Yeah.

121

00:06:12,840 --> 00:06:14,760

What made you realize that you liked coding?

122

00:06:14,760 --> 00:06:18,840

What have you had to code or what about it interests you?

123

00:06:18,840 --> 00:06:26,120

Well, things like coding and editing in general, something about it I just really like.

124

00:06:26,120 --> 00:06:31,520

And what opportunities have you had to code before this?

125

00:06:31,520 --> 00:06:39,220

Before in summer school classes, I've taken different classes about either coding on Scratch

126

00:06:39,220 --> 00:06:44,680

and stuff or other ones were editing and stuff.

127

00:06:44,680 --> 00:06:48,200

But I did a lot of coding ones too.

128

00:06:48,200 --> 00:06:50,200

I enjoyed Scratch a lot.

129

00:06:50,200 --> 00:06:51,200

Okay.

130

00:06:51,200 --> 00:06:57,880

Milo, give me an example of a problem you had to troubleshoot for Lego League.

131

00:06:57,880 --> 00:07:03,600

One time, one of the wheels on our robot, because we added on another section that had

132

00:07:03,600 --> 00:07:10,040

wheels on it, and it was lifting up one of the moving wheels on the actual robot.

133

00:07:10,040 --> 00:07:13,880

So I had to problem solve to get it to the correct height where all the wheels were on

134

00:07:13,880 --> 00:07:14,880

the ground.

135

00:07:14,880 --> 00:07:19,440

So you guys did a competition, right, at Franklin?

136

00:07:19,440 --> 00:07:20,440

What was that like?

137

00:07:20,440 --> 00:07:23,800

So what was the task you had to do?

138

00:07:23,800 --> 00:07:29,800

The task was to get the maximum points as possible to your ability.

139

00:07:29,800 --> 00:07:36,480

And you would have to go around the course and you only had one free grab.

140

00:07:36,480 --> 00:07:41,320

So if it stops working, like not working, but if it stops moving and it's not where

141

00:07:41,320 --> 00:07:45,900

you want it to go, you can grab it and put it in one of the home spots.

142

00:07:45,900 --> 00:07:52,120

So you could try that again, and you have to get the maximum amount of points.

143

00:07:52,120 --> 00:07:57,520

And you also had to do a little presentation on, like, I guess kind of the community and

144

00:07:57,520 --> 00:08:00,160

how you can impact it.

145

00:08:00,160 --> 00:08:01,400

Was there a theme to the course?

146

00:08:01,400 --> 00:08:05,320

I know the first time I had ever heard about this, it had to do with like pretending the

147

00:08:05,320 --> 00:08:10,960

robot was a programmed virus, so it would have to take information from here to there.

148

00:08:10,960 --> 00:08:11,960

What was the theme?

149

00:08:11,960 --> 00:08:14,560

Was there something like that for this competition?

150

00:08:14,560 --> 00:08:20,360

The theme for this year was the different types of artwork you could do, and it was

151

00:08:20,360 --> 00:08:23,080

nicknamed Masterpiece.

152

00:08:23,080 --> 00:08:26,080

And how did that work with LEGOs, with artwork?

153

00:08:26,080 --> 00:08:28,840

Well, you would build these different sets.

154

00:08:28,840 --> 00:08:36,320

Some of them were like a theater, kind of, and others were like the light show or the

155

00:08:36,320 --> 00:08:40,040

virtual reality or 3D printer.

156

00:08:40,040 --> 00:08:42,080

There was one of those, too.

157

00:08:42,080 --> 00:08:45,840

And there was also a separate mission where you can build your own masterpiece and transport

158

00:08:45,840 --> 00:08:47,880

it to the museum on a pedestal.

159

00:08:47,880 --> 00:08:48,880

Oh, I see.

160

00:08:48,880 --> 00:08:52,840

So then you would have to build it and then have the robot take it from here to there

161

00:08:52,840 --> 00:08:57,440

and follow a path that you programmed through all the other things you built.

162

00:08:57,440 --> 00:08:58,440

Interesting.

163

00:08:58,440 --> 00:09:00,440

So was it fun?

164

00:09:00,440 --> 00:09:01,440

Yeah.

165

00:09:01,440 --> 00:09:02,440

Yeah?

166

00:09:02,440 --> 00:09:05,240

Well, how many other teams were there?

167

00:09:05,240 --> 00:09:06,240

Just the two.

168

00:09:06,240 --> 00:09:07,240

Well, from here, yeah.

169

00:09:07,240 --> 00:09:08,240

From here.

170

00:09:08,240 --> 00:09:10,960

And then at Franklin, were there a bunch of others?

171

00:09:10,960 --> 00:09:12,240

The entire gym was filled.

172

00:09:12,240 --> 00:09:13,240

Yeah.

173

00:09:13,240 --> 00:09:14,240

I'd say about 30.

174

00:09:14,240 --> 00:09:15,680

My cousins got to go to the next one.

175

00:09:15,680 --> 00:09:16,680

Oh, yeah?

176

00:09:16,680 --> 00:09:17,680

They moved on.

177

00:09:17,680 --> 00:09:18,680

They made it up to the next rebuild?

178

00:09:18,680 --> 00:09:19,680

Yeah.

179

00:09:19,680 --> 00:09:20,680

They were the Catlins from a creek.

180

00:09:20,680 --> 00:09:21,680

Oh.

181

00:09:21,680 --> 00:09:22,680

Awesome.

182

00:09:22,680 --> 00:09:23,680

So fun.

183

00:09:23,680 --> 00:09:28,440

So what I found that it's fun to do projects like that, but when you go to a bigger event

184

00:09:28,440 --> 00:09:34,200

where there are other people there, it kind of reinforces how much I enjoyed it.

185

00:09:34,200 --> 00:09:36,560

Was that your feeling there?

186

00:09:36,560 --> 00:09:39,200

Or was it intimidating that there were so many other teams there?

187

00:09:39,200 --> 00:09:41,200

I had too many Pepsi bottles.

188

00:09:41,200 --> 00:09:42,200

Yeah.

189

00:09:42,200 --> 00:09:43,200

So you're all caffeinated.

190

00:09:43,200 --> 00:09:44,200

It was a long day.

191

00:09:44,200 --> 00:09:45,200

Yeah.

192

00:09:45,200 --> 00:09:50,320

It was fun, and it was a little nervous, nerve wracking, because there were so many other

193

00:09:50,320 --> 00:09:54,320

teams and they all had different builds and stuff.

194

00:09:54,320 --> 00:09:57,760

And it was so cool because we were just a beginning.

195

00:09:57,760 --> 00:09:58,760

We're beginning teams.

196

00:09:58,760 --> 00:09:59,760

Yeah.

197

00:09:59,760 --> 00:10:03,880

So seeing all of that is really inspiring, but also a little nerve wracking.

198

00:10:03,880 --> 00:10:09,800

But it was really fun because during the whole LEGO League process in general, we all became

199

00:10:09,800 --> 00:10:10,800

friends.

200

00:10:10,800 --> 00:10:13,080

Like all of us are friends now.

201

00:10:13,080 --> 00:10:14,080

And the team.

202

00:10:14,080 --> 00:10:15,080

Yeah.

203

00:10:15,080 --> 00:10:16,080

Both teams together.

204

00:10:16,080 --> 00:10:17,080

Very nice.

205

00:10:17,080 --> 00:10:20,880

So Mrs. Barnett, your turn.

206

00:10:20,880 --> 00:10:23,120

Yay.

207

00:10:23,120 --> 00:10:33,200

So tell me about how we got two first LEGO teams and some of those kind of big ideas

208

00:10:33,200 --> 00:10:34,200

behind them.

209

00:10:34,200 --> 00:10:35,720

Because it sounds like a lot of fun.

210

00:10:35,720 --> 00:10:36,800

It is a lot of fun.

211

00:10:36,800 --> 00:10:41,440

So I've previously worked with a school that started up a LEGO team, and there was some

212

00:10:41,440 --> 00:10:44,920

parent interest because their kids had to take some summer camps and they wanted to

213

00:10:44,920 --> 00:10:45,920

continue this.

214

00:10:45,920 --> 00:10:48,200

And I was like, oh yeah, I can do that.

215

00:10:48,200 --> 00:10:51,360

So I was like, but I need parents and we need to have enough students.

216

00:10:51,360 --> 00:10:52,360

And what do you know?

217

00:10:52,360 --> 00:10:54,380

We had enough students for two teams.

218

00:10:54,380 --> 00:10:56,880

So we had a big interest.

219

00:10:56,880 --> 00:11:00,560

We had some students come and go from the teams, but we probably had about 20 kids throughout

220

00:11:00,560 --> 00:11:02,320
the season off and on.

221
00:11:02,320 --> 00:11:05,840
We ended with about 15 at the actual competitions.

222
00:11:05,840 --> 00:11:10,160
And it worked out really well because I teach STEM and this is kind of like applying what

223
00:11:10,160 --> 00:11:13,920
we learned in my classes into the real world.

224
00:11:13,920 --> 00:11:15,840
Yeah, interesting.

225
00:11:15,840 --> 00:11:18,600
What did it take to get set up with the team?

226
00:11:18,600 --> 00:11:19,600
What is the equipment?

227
00:11:19,600 --> 00:11:21,800
I mean, they had to buy the robots, right?

228
00:11:21,800 --> 00:11:27,200
We ended up with a couple of grants to purchase the new robot kits, the competition mats with

229
00:11:27,200 --> 00:11:28,200
their pieces.

230
00:11:28,200 --> 00:11:32,640
We ended up buying some extra pieces because we had zero Legos to start with.

231

00:11:32,640 --> 00:11:38,840

And Lego is really good at their pieces all connect together and we're able to use like

232

00:11:38,840 --> 00:11:42,440

regular building pieces with the robotics pieces and build some really cool stuff.

233

00:11:42,440 --> 00:11:44,480

Oh, that was going to be my next question.

234

00:11:44,480 --> 00:11:45,480

Yeah.

235

00:11:45,480 --> 00:11:46,480

That's, that's decent.

236

00:11:46,480 --> 00:11:49,160

That is not just a special piece for the robot competition.

237

00:11:49,160 --> 00:11:50,160

Yeah.

238

00:11:50,160 --> 00:11:52,200

And it lets you add a lot of creativity.

239

00:11:52,200 --> 00:11:53,200

Yes.

240

00:11:53,200 --> 00:11:54,200

The students can have a lot of creativity.

241

00:11:54,200 --> 00:11:58,440

They can pick, you know, certain colors they wanted or they could think, Oh, we need an

242

00:11:58,440 --> 00:11:59,840
arm that builds like this.

243
00:11:59,840 --> 00:12:01,000
Let's use this type of piece.

244
00:12:01,000 --> 00:12:04,880
And I saw this one time and I want to do this.

245
00:12:04,880 --> 00:12:10,680
What's the difference between having an extracurricular team like this versus teaching it?

246
00:12:10,680 --> 00:12:14,440
So with the team, we were able to hang out a lot.

247
00:12:14,440 --> 00:12:19,680
And while we had goals, I was able to make it very student driven with my, with my kiddos

248
00:12:19,680 --> 00:12:24,600
and the teams and it was really up to them of how they wanted to accomplish those goals.

249
00:12:24,600 --> 00:12:28,760
They were a lot more in charge of driving the team and how it operated and what they

250
00:12:28,760 --> 00:12:30,960
accomplished and things like that.

251
00:12:30,960 --> 00:12:35,280
And it was really fun to see them take charge of their projects and take an ownership to

252
00:12:35,280 --> 00:12:38,960
it and really put their personalized spin on it.

253

00:12:38,960 --> 00:12:42,760

Not because they have to for a lesson or for a grade, but because they wanted to and they

254

00:12:42,760 --> 00:12:44,120

wanted to make it awesome.

255

00:12:44,120 --> 00:12:48,160

And they wanted to show that they could do this and they wanted to get those extra points.

256

00:12:48,160 --> 00:12:53,000

And it was really fun to see that drive in the students that wasn't grade linked.

257

00:12:53,000 --> 00:12:54,200

It was just for fun.

258

00:12:54,200 --> 00:12:55,200

Sure.

259

00:12:55,200 --> 00:13:00,720

And how do you facilitate a team from just a bunch of kids who volunteered to a team

260

00:13:00,720 --> 00:13:04,860

and then someone who wants a group that could compete at something like you did?

261

00:13:04,860 --> 00:13:08,360

So what's really cool is that Lego has their engineering notebooks that kind of guide you

262

00:13:08,360 --> 00:13:09,540

through that process.

263

00:13:09,540 --> 00:13:13,320

But we start with the basics of this is how we're building and let's everybody, we're

264

00:13:13,320 --> 00:13:15,960
going to build the challenge sets that go onto the mat.

265
00:13:15,960 --> 00:13:20,320
So we're working on instructions, working with teamwork, having the other adult mentors

266
00:13:20,320 --> 00:13:24,600
and I to help the students and guide them in that process, but we're not doing it for

267
00:13:24,600 --> 00:13:25,760
them.

268
00:13:25,760 --> 00:13:30,440
And so we went from like basic building to, okay, let's build a really basic robot.

269
00:13:30,440 --> 00:13:33,500
Okay, let's make it go forward.

270
00:13:33,500 --> 00:13:37,260
And then we're like, okay, well, what if we wanted to stop before it hits that object

271
00:13:37,260 --> 00:13:38,840
and we started talking about sensors?

272
00:13:38,840 --> 00:13:43,640
So it's really starting at square, like zero, and then slowly adding on new and new and

273
00:13:43,640 --> 00:13:44,640
new techniques.

274
00:13:44,640 --> 00:13:48,320
And I think like one of our goals for next year is to get more into the different sensors

275

00:13:48,320 --> 00:13:49,320
and what they can do.

276

00:13:49,320 --> 00:13:53,720
Because there's some really cool sensors, ultrasonic sensors, distance color that Lego

277

00:13:53,720 --> 00:13:55,920
has that we can utilize better.

278

00:13:55,920 --> 00:13:56,920
Sure.

279

00:13:56,920 --> 00:13:57,920
And I'm sorry, this is boring.

280

00:13:57,920 --> 00:14:01,880
Well, I hope it's not boring guys, but how does it fit into the curriculum of what we

281

00:14:01,880 --> 00:14:02,880
do?

282

00:14:02,880 --> 00:14:10,240
Like how does the skills that you apply on the team kind of mesh with what we teach?

283

00:14:10,240 --> 00:14:14,600
So a lot of my curriculum is aligned to the engineering standards, and this is definitely

284

00:14:14,600 --> 00:14:19,880
taking problem solving through the engineering design process where we identify the problem,

285

00:14:19,880 --> 00:14:23,400
figure out what we know, do some research on what we don't know.

286

00:14:23,400 --> 00:14:28,480

We come up with like five different ways and then we pick the best one and go on from there.

287

00:14:28,480 --> 00:14:32,680

And if that didn't work, well, we're back to the loop again and thinking about new solutions.

288

00:14:32,680 --> 00:14:37,400

And that's something that we work on in class from the little projects we've done from building

289

00:14:37,400 --> 00:14:42,400

a paper tower all the way up to the Arduinos that were coding in eighth grade.

290

00:14:42,400 --> 00:14:44,960

And that's something that my Lego students had to constantly do.

291

00:14:44,960 --> 00:14:49,280

And even if they weren't told it was exactly the engineering loop, they were doing that

292

00:14:49,280 --> 00:14:53,260

process of redesigning and researching again and fixing things.

293

00:14:53,260 --> 00:14:57,680

And it was really cool to see that application of what we're doing in class with standards

294

00:14:57,680 --> 00:15:00,120

to just a fun activity for the students.

295

00:15:00,120 --> 00:15:01,120

Sure.

296

00:15:01,120 --> 00:15:03,840

I guess I'll ask the students here too.

297

00:15:03,840 --> 00:15:08,440

Did you feel that there was, do you see an application for this?

298

00:15:08,440 --> 00:15:13,480

Do you feel like maybe it's helping more in class or that you're seeing the world a little

299

00:15:13,480 --> 00:15:15,960

differently now that you're troubleshooting?

300

00:15:15,960 --> 00:15:18,680

Either of you could answer that.

301

00:15:18,680 --> 00:15:26,000

Yeah, it was a lot about problem solving because as Ms. Barnett said, if it doesn't work, you

302

00:15:26,000 --> 00:15:27,720

try again.

303

00:15:27,720 --> 00:15:34,040

And it just helped us learn how to do that.

304

00:15:34,040 --> 00:15:42,160

And if I'm in a, if I'm trying to solve a problem I can't, I'll, or for a project, say,

305

00:15:42,160 --> 00:15:43,760

I'll be like, okay, let me do this.

306

00:15:43,760 --> 00:15:45,200

Oh wait, no, that doesn't work.

307

00:15:45,200 --> 00:15:46,280

Let me try this.

308

00:15:46,280 --> 00:15:47,280

So it does help.

309

00:15:47,280 --> 00:15:50,120

And it's kind of like a muscle you build up.

310

00:15:50,120 --> 00:15:54,200

And then what else, what am I not asking about First Lego League?

311

00:15:54,200 --> 00:15:56,200

What else is there that we need to know?

312

00:15:56,200 --> 00:16:00,760

Okay, so some really cool things is the kids really had to learn how to work together and

313

00:16:00,760 --> 00:16:04,200

we got some really different personalities on the team.

314

00:16:04,200 --> 00:16:08,520

People that were not friends to begin with and students that I've had previously that

315

00:16:08,520 --> 00:16:10,440

was like, oh, you want to try Lego?

316

00:16:10,440 --> 00:16:13,040

Okay, I didn't pitch you there, but it's cool.

317

00:16:13,040 --> 00:16:14,600

And I got to see a new side of them.

318

00:16:14,600 --> 00:16:19,460

And so we really got students connecting that might not have connected ever.

319

00:16:19,460 --> 00:16:24,440

And now because of Lego, they have this common bond bond that's really, really strong and

320

00:16:24,440 --> 00:16:26,840

they really enjoyed being around each other.

321

00:16:26,840 --> 00:16:28,920

So it was really fun to see that side of it.

322

00:16:28,920 --> 00:16:33,020

It was really fun for my students to see the Lego competitions.

323

00:16:33,020 --> 00:16:34,600

It's not about winning.

324

00:16:34,600 --> 00:16:37,320

It's not about beating the other team and things like that.

325

00:16:37,320 --> 00:16:39,480

It's about doing your best.

326

00:16:39,480 --> 00:16:45,080

I believe Lego calls it cooperation, where you're cooperating, but it's a competition.

327

00:16:45,080 --> 00:16:49,720

And it's really about doing your best and seeing my students supporting each other,

328

00:16:49,720 --> 00:16:50,720

cheering for each other.

329

00:16:50,720 --> 00:16:53,960

Hey, we're going to go sit in the crowd because the other team has their match at this time

330

00:16:53,960 --> 00:16:54,960
and we want to be there.

331
00:16:54,960 --> 00:16:57,120
And I'm like, okay, sounds great.

332
00:16:57,120 --> 00:17:00,240
And they're screaming and yelling from the crowd when appropriate.

333
00:17:00,240 --> 00:17:05,160
And it was really fun to see that side of it and to see other random schools cheering

334
00:17:05,160 --> 00:17:06,160
us on.

335
00:17:06,160 --> 00:17:07,160
I liked seeing that.

336
00:17:07,160 --> 00:17:08,360
I thought that was really cool.

337
00:17:08,360 --> 00:17:12,840
And then seeing my students cheer on those other teams because they thought their hats

338
00:17:12,840 --> 00:17:17,000
looked funny or they thought their robot did really good the last time they were against

339
00:17:17,000 --> 00:17:18,420
them in the match.

340
00:17:18,420 --> 00:17:21,080
And so it was a really good partnership with that.

341

00:17:21,080 --> 00:17:26,360

And I got to hang out with the students after school doing a fun activity that they wanted

342

00:17:26,360 --> 00:17:27,360

to do.

343

00:17:27,360 --> 00:17:29,640

And it was really just a fun experience.

344

00:17:29,640 --> 00:17:30,640

Yeah.

345

00:17:30,640 --> 00:17:31,640

Yeah.

346

00:17:31,640 --> 00:17:32,640

So what's next for the teams?

347

00:17:32,640 --> 00:17:33,640

But what comes next?

348

00:17:33,640 --> 00:17:34,640

Do you guys know?

349

00:17:34,640 --> 00:17:35,640

Okay.

350

00:17:35,640 --> 00:17:38,320

So we're going to be part of the middle school showcase.

351

00:17:38,320 --> 00:17:39,760

That's actually this Thursday.

352

00:17:39,760 --> 00:17:42,760

And then we're going to be part of STEAM night that's coming up with the district.

353

00:17:42,760 --> 00:17:47,200

We're going to be showcasing our robots along with the high school's robotics team.

354

00:17:47,200 --> 00:17:50,720

And then we're going to keep meeting throughout the school year and learning some of those

355

00:17:50,720 --> 00:17:56,000

new sensor skills and things like that, some new challenges and team building stuff.

356

00:17:56,000 --> 00:17:57,960

And then in the fall, we'll do this again.

357

00:17:57,960 --> 00:17:58,960

Yeah.

358

00:17:58,960 --> 00:18:01,920

So there's just kind of like a one competition round in the fall.

359

00:18:01,920 --> 00:18:02,920

Yeah.

360

00:18:02,920 --> 00:18:05,960

If we make it to the next levels, we only made it to the first level this year, but we have

361

00:18:05,960 --> 00:18:08,320

our we're aiming high for the next years.

362

00:18:08,320 --> 00:18:09,320

Awesome.

363

00:18:09,320 --> 00:18:10,600

So it was a great first year.

364

00:18:10,600 --> 00:18:16,880

And then is there an I guess for parents who might want their to ask their child if they

365

00:18:16,880 --> 00:18:20,640

want to do this, what's how do you get involved?

366

00:18:20,640 --> 00:18:21,640

Reach out to me.

367

00:18:21,640 --> 00:18:22,920

Send me an email.

368

00:18:22,920 --> 00:18:27,880

Have your kiddo stop by after school, see me at conferences or whenever you see me around.

369

00:18:27,880 --> 00:18:28,920

But reach out to me.

370

00:18:28,920 --> 00:18:30,600

Let me know your students interested.

371

00:18:30,600 --> 00:18:35,480

I'll give you details on times and dates and calendars and stuff like that.

372

00:18:35,480 --> 00:18:39,040

I do ask that if kids obviously they can try it out.

373

00:18:39,040 --> 00:18:42,680

But if they're going to commit to the team, I ask that they try to be there for most of

374

00:18:42,680 --> 00:18:43,680
the practices.

375
00:18:43,680 --> 00:18:44,840
And I know stuff comes up.

376
00:18:44,840 --> 00:18:45,840
Life happens.

377
00:18:45,840 --> 00:18:46,840
Sure.

378
00:18:46,840 --> 00:18:51,360
So if you're interested, just reach out to me and I will send you information, tell you

379
00:18:51,360 --> 00:18:53,920
our next practices and things like that.

380
00:18:53,920 --> 00:18:58,000
Our teams have been very open to new students coming in and they've been really excited

381
00:18:58,000 --> 00:19:01,200
when new somebody new comes in because they get to explain everything to them.

382
00:19:01,200 --> 00:19:06,840
So anytime we can join and if parents are interested in helping, I'm definitely in looking

383
00:19:06,840 --> 00:19:08,280
for more parent helpers.

384
00:19:08,280 --> 00:19:11,880
Is there a limit to the number of students who can participate?

385

00:19:11,880 --> 00:19:17,000

We are limited to 10 students on each team, but if we had enough adults and stuff like

386

00:19:17,000 --> 00:19:19,720

that, I wouldn't be opposed to a third team and things like that.

387

00:19:19,720 --> 00:19:25,200

So the limit is our resources there as far as adults and students wanting to commit to

388

00:19:25,200 --> 00:19:27,560

this.

389

00:19:27,560 --> 00:19:34,640

And I guess we started with students and they're what would you say to a student who might

390

00:19:34,640 --> 00:19:37,760

be thinking about this?

391

00:19:37,760 --> 00:19:40,120

What would you say to get them on the team?

392

00:19:40,120 --> 00:19:42,800

I would say it's fun.

393

00:19:42,800 --> 00:19:43,800

It's Legos.

394

00:19:43,800 --> 00:19:47,520

You learn things and it's friendship.

395

00:19:47,520 --> 00:19:49,960

Like all of us became friends at the very end.

396

00:19:49,960 --> 00:19:57,560

Well, in the middle, but yeah, we became friends and we just kind of became even closer friends

397

00:19:57,560 --> 00:20:01,340

when like during the competition, especially.

398

00:20:01,340 --> 00:20:06,120

Thank you to Mrs. Barnett and to Milo and to Isabelle for being brave and coming on

399

00:20:06,120 --> 00:20:07,720

our podcast again.

400

00:20:07,720 --> 00:20:10,160

Thank you for listening to this latest episode.

401

00:20:10,160 --> 00:20:17,680

If you think you might want to join the First Lego League, you can email Mrs. Barnett at

402

00:20:17,680 --> 00:20:26,120

jbarnett.stsm.k12.wi.us and mark your calendars for Steam Night on February 1st, 5 to 7 p.m.

403

00:20:26,120 --> 00:20:27,120

in the high school.

404

00:20:27,120 --> 00:20:31,120

First Lego League team will be there along with a lot of our other students.

405

00:20:31,120 --> 00:20:36,040

It's one of the biggest events in the school district throughout the whole year.

406

00:20:36,040 --> 00:20:40,880

We showcase student work, focus on how science, technology, engineering, arts and math all

407

00:20:40,880 --> 00:20:43,560
intersect in our culture and in our schools.

408
00:20:43,560 --> 00:20:47,040
There'll be a light meal available, raffle items and more.

409
00:20:47,040 --> 00:20:48,700
Steam Night, February 1st.

410
00:20:48,700 --> 00:20:50,920
See yourself as an inventor.

411
00:20:50,920 --> 00:20:54,440
And finally for this episode, I'd like to leave you with a message from Superintendent

412
00:20:54,440 --> 00:21:00,560
Deidre Raymer about some important board updates and what that might mean for the taxpayers

413
00:21:00,560 --> 00:21:02,120
in our community.

414
00:21:02,120 --> 00:21:06,120
Thanks for listening and we'll see you next time.

415
00:21:06,120 --> 00:21:15,720
Hi, it's Superintendent Deidre Raymer with an important update from our school board.

416
00:21:15,720 --> 00:21:20,360
After a long and arduous process, our board has decided to add a referendum question to

417
00:21:20,360 --> 00:21:24,200
the ballot on April 2nd, 2024.

418

00:21:24,200 --> 00:21:31,160

We're asking for your support to add \$2 million each year for the next five years.

419

00:21:31,160 --> 00:21:36,960

On your taxes, that's going to mean for a house that's valued at \$200,000, no more than

420

00:21:36,960 --> 00:21:40,720

\$8 each year for those five years.

421

00:21:40,720 --> 00:21:45,560

With that investment and your continued support, we can do some incredible things on behalf

422

00:21:45,560 --> 00:21:47,320

of our students.

423

00:21:47,320 --> 00:21:52,000

One of our objectives with those dollars is to enhance our safety measures in our schools.

424

00:21:52,000 --> 00:21:53,080

Our schools are safe.

425

00:21:53,080 --> 00:21:58,920

We have staff and students who come to school in a safe environment each and every day,

426

00:21:58,920 --> 00:22:05,280

but we can always do more when it comes to increasing our opportunities around safety.

427

00:22:05,280 --> 00:22:09,000

A large piece of feedback I've gotten from the community since I came here in July was

428

00:22:09,000 --> 00:22:13,120

that the traffic mitigation on 15th Street needs to be addressed.

429

00:22:13,120 --> 00:22:17,740

We've taken some measures, but these additional dollars will allow us to add a continuous

430

00:22:17,740 --> 00:22:22,720

plan out front to make sure that drop-off and pick-up time can be safe not only in front

431

00:22:22,720 --> 00:22:26,440

of our middle school and high school, but do some things to address the safety issues

432

00:22:26,440 --> 00:22:28,520

at our elementary schools as well.

433

00:22:28,520 --> 00:22:33,480

In addition, we'll be able to add additional cameras and ways to monitor traffic coming

434

00:22:33,480 --> 00:22:35,280

in and out of our buildings as well.

435

00:22:35,280 --> 00:22:40,840

We've added multiple cameras in the last several years with our general operating budget, but

436

00:22:40,840 --> 00:22:45,720

we could use more, and these additional dollars will allow us to do that on behalf of our

437

00:22:45,720 --> 00:22:48,560

students and our staff.

438

00:22:48,560 --> 00:22:53,440

One of the things we know that students rely on for support are staff that are there year

439

00:22:53,440 --> 00:22:59,160

after year after year, and recruiting and retaining staff members within any school

440

00:22:59,160 --> 00:23:03,200

district has gotten much more challenging with a national teacher shortage and some

441

00:23:03,200 --> 00:23:05,120

workforce shortage areas.

442

00:23:05,120 --> 00:23:09,800

So we will use these additional dollars to ensure that we can recruit and retain high

443

00:23:09,800 --> 00:23:17,160

quality individuals in each one of our school sites, as well as add some technology upgrades.

444

00:23:17,160 --> 00:23:21,640

We do a great job at making sure that our students have refreshed devices and our staff

445

00:23:21,640 --> 00:23:26,600

have refreshed devices, but all the rest of the technology that goes into our students

446

00:23:26,600 --> 00:23:32,080

being prepared to go out into the world and be ready to live life in this world today

447

00:23:32,080 --> 00:23:33,600

needs to be enhanced.

448

00:23:33,600 --> 00:23:38,000

So we'll use some of the additional dollars to do the technology upgrades as well.

449

00:23:38,000 --> 00:23:42,720

And lastly, we'll use some of the dollars to do some enhanced career exploration.

450

00:23:42,720 --> 00:23:46,720

We do an excellent job at our high school at having opportunities for students to do

451

00:23:46,720 --> 00:23:51,000

youth apprenticeship, for earning college credits during their time in high school,

452

00:23:51,000 --> 00:23:55,720

but frequently our elementary and our intermediate families do not always know about the opportunities

453

00:23:55,720 --> 00:23:57,900

available to our students.

454

00:23:57,900 --> 00:24:01,120

We want our students to have every single opportunity.

455

00:24:01,120 --> 00:24:06,080

So we're going to start enhancing what we do for K-12 career exploration at the elementary

456

00:24:06,080 --> 00:24:11,160

school by adding some more exposure to students and adding some academic and career planning

457

00:24:11,160 --> 00:24:16,160

at the elementary level, then carry that through our middle school and then all the way through

458

00:24:16,160 --> 00:24:20,880

our high school so that we know our students are going out into the world with a plan that

459

00:24:20,880 --> 00:24:24,840

they really can stand behind and feel passionate about.

460

00:24:24,840 --> 00:24:30,400

You may be wondering how a no more than \$8 increase on a \$200,000 home could possibly

461

00:24:30,400 --> 00:24:31,640

pay for all of this.

462

00:24:31,640 --> 00:24:36,760

We have a rare opportunity right now with some energy efficiency debt falling off that

463

00:24:36,760 --> 00:24:42,820

allows us to maximize that investment to be able to do all the things we want to on behalf

464

00:24:42,820 --> 00:24:44,460

of our students.

465

00:24:44,460 --> 00:24:48,440

As we know, strong schools create a strong community.

466

00:24:48,440 --> 00:24:52,920

In the coming weeks, you're going to see myself, our director team, as well as our school board

467

00:24:52,920 --> 00:24:54,800

out and about in the community.

468

00:24:54,800 --> 00:24:59,120

We encourage you to stop and ask us whatever questions you have or check out our website

469

00:24:59,120 --> 00:25:03,600

to make sure that you're getting all the information you need to make an informed decision for

470

00:25:03,600 --> 00:25:04,600

yourself.

471

00:25:04,600 --> 00:25:08,840

We look forward to seeing you in the coming weeks and we look forward to you showing up

472

00:25:08,840 --> 00:25:19,520

to vote on April 2nd.