



DAVE CURRY

HOLLAND MIDDLE SCHOOL,
HOLLAND, PENNSYLVANIA

1
00:00:09,270 --> 00:00:06,789
this past monday was earth day

2
00:00:11,270 --> 00:00:09,280
and all of this earth week we have been

3
00:00:12,950 --> 00:00:11,280
putting a spotlight on different ways

4
00:00:15,749 --> 00:00:12,960
that the international space station is

5
00:00:17,349 --> 00:00:15,759
used to study our planet

6
00:00:19,590 --> 00:00:17,359
astronauts on the station of course have

7
00:00:21,510 --> 00:00:19,600
been taking impromptu pictures of earth

8
00:00:24,070 --> 00:00:21,520
since they arrived more than a dozen

9
00:00:26,070 --> 00:00:24,080
years ago as well as getting particular

10
00:00:27,910 --> 00:00:26,080
images that are requested by scientists

11
00:00:29,990 --> 00:00:27,920
on the ground who are documenting the

12
00:00:30,870 --> 00:00:30,000
state of different locations on the

13
00:00:32,950 --> 00:00:30,880

ground

14

00:00:34,870 --> 00:00:32,960

there are also pictures taken by cameras

15

00:00:36,870 --> 00:00:34,880

that are on board the station yet are

16

00:00:39,110 --> 00:00:36,880

controlled by people who are on the

17

00:00:41,110 --> 00:00:39,120

ground and in this case it's young

18

00:00:42,790 --> 00:00:41,120

people middle school and college

19

00:00:45,670 --> 00:00:42,800

students who are working together to

20

00:00:47,510 --> 00:00:45,680

take part in space station program as

21

00:00:50,150 --> 00:00:47,520

well as the study of earth

22

00:00:53,270 --> 00:00:50,160

the investigation is called earth cam it

23

00:00:55,750 --> 00:00:53,280

was founded by sally ride it flew on

24

00:00:57,110 --> 00:00:55,760

shuttle missions in the late 1990s and

25

00:00:59,670 --> 00:00:57,120

has been operating on the international

26

00:01:02,069 --> 00:00:59,680

space station since expedition 2.

27

00:01:04,469 --> 00:01:02,079

the photographs that it takes and posts

28

00:01:06,630 --> 00:01:04,479

on its website are captured by a camera

29

00:01:09,109 --> 00:01:06,640

that looks down through a window at the

30

00:01:11,109 --> 00:01:09,119

earth the targets for those photos are

31

00:01:13,510 --> 00:01:11,119

determined by participating middle

32

00:01:15,270 --> 00:01:13,520

school students at schools not only

33

00:01:16,230 --> 00:01:15,280

across the country but all around the

34

00:01:17,429 --> 00:01:16,240

world

35

00:01:19,590 --> 00:01:17,439

today we're going to learn a little more

36

00:01:21,990 --> 00:01:19,600

about earth cam from the point of view

37

00:01:25,030 --> 00:01:22,000

of those who are participating joining

38

00:01:26,950 --> 00:01:25,040

me on the phone is dave curry dave is an

39

00:01:28,870 --> 00:01:26,960

8th grade earth and space science

40

00:01:31,590 --> 00:01:28,880

teacher at holland middle school in

41

00:01:33,429 --> 00:01:31,600

holland pennsylvania dave how long have

42

00:01:34,950 --> 00:01:33,439

you had your students participating in

43

00:01:37,350 --> 00:01:34,960

earth camp

44

00:01:40,310 --> 00:01:37,360

hi pat uh thanks for having me today

45

00:01:41,990 --> 00:01:40,320

we learned about earth cam first from a

46

00:01:45,749 --> 00:01:42,000

fellow teacher in

47

00:01:48,550 --> 00:01:45,759

2006 in january 2006 and i've been an

48

00:01:51,109 --> 00:01:48,560

active participant since then i've been

49

00:01:55,109 --> 00:01:51,119

using it every year in my classroom

50

00:01:56,630 --> 00:01:55,119

what was it that attracted you to it

51
00:01:59,590 --> 00:01:56,640
middle school is really

52
00:02:01,670 --> 00:01:59,600
an age where we try to hook kids on

53
00:02:03,350 --> 00:02:01,680
science and we try to have them actively

54
00:02:06,069 --> 00:02:03,360
involved in the learning with hands-on

55
00:02:07,670 --> 00:02:06,079
activity minds on activity so i was

56
00:02:10,150 --> 00:02:07,680
really attracted by the fact that kids

57
00:02:11,830 --> 00:02:10,160
were actually involved doing something

58
00:02:13,270 --> 00:02:11,840
themselves and they would see a result

59
00:02:15,030 --> 00:02:13,280
from that

60
00:02:17,270 --> 00:02:15,040
it's one thing for a teacher to to think

61
00:02:19,190 --> 00:02:17,280
that your students would enjoy this i

62
00:02:21,510 --> 00:02:19,200
wonder if in practice you found that

63
00:02:24,070 --> 00:02:21,520

they have

64

00:02:25,510 --> 00:02:24,080

i have in fact the kids when i tell them

65

00:02:28,070 --> 00:02:25,520

we're going to the library to get on the

66

00:02:29,910 --> 00:02:28,080

computer to do earth cam i hear yes all

67

00:02:31,589 --> 00:02:29,920

right like awesome because they're

68

00:02:33,830 --> 00:02:31,599

they're excited to go to the library and

69

00:02:36,070 --> 00:02:33,840

and do this uh it's sure beat sitting in

70

00:02:37,990 --> 00:02:36,080

the classroom and maybe listening to

71

00:02:39,750 --> 00:02:38,000

lecture or taking notes which

72

00:02:41,270 --> 00:02:39,760

tunes them out so this really tunes them

73

00:02:42,630 --> 00:02:41,280

into learning and gets them involved

74

00:02:45,190 --> 00:02:42,640

with the science

75

00:02:47,509 --> 00:02:45,200

uh speaking only on behalf of one former

76

00:02:49,509 --> 00:02:47,519

middle class middle school student i i

77

00:02:51,270 --> 00:02:49,519

can think that some of them might be a

78

00:02:53,190 --> 00:02:51,280

little intimidated by the idea that

79

00:02:55,110 --> 00:02:53,200

they're going to take part in the space

80

00:02:57,030 --> 00:02:55,120

program

81

00:02:59,509 --> 00:02:57,040

they actually find it hard to believe

82

00:03:01,190 --> 00:02:59,519

that they're actually controlling

83

00:03:02,550 --> 00:03:01,200

a camera on the international space

84

00:03:03,910 --> 00:03:02,560

station they're familiar with google

85

00:03:05,990 --> 00:03:03,920

earth and they know how to look at

86

00:03:07,270 --> 00:03:06,000

images from space but when i tell them

87

00:03:11,030 --> 00:03:07,280

that the picture that they're going to

88

00:03:12,550 --> 00:03:11,040

take is is almost live it's like right

89

00:03:16,790 --> 00:03:12,560

now

90

00:03:19,509 --> 00:03:16,800

picture is taken that just brings a

91

00:03:22,070 --> 00:03:19,519

whole level of realism to it that makes

92

00:03:24,149 --> 00:03:22,080

it uh even more interesting i think to

93

00:03:25,830 --> 00:03:24,159

them and and they tell me this

94

00:03:27,350 --> 00:03:25,840

well i'm going to ask you to hand off

95

00:03:29,350 --> 00:03:27,360

the phone right now and see if we can't

96

00:03:31,670 --> 00:03:29,360

get a couple of them to tell the rest of

97

00:03:33,589 --> 00:03:31,680

us uh how they how they do it we're

98

00:03:35,430 --> 00:03:33,599

going to hear now from a couple of uh

99

00:03:38,149 --> 00:03:35,440

dave curry's students about their

100

00:03:41,110 --> 00:03:38,159

participation in earth camp uh first on

101
00:03:43,190 --> 00:03:41,120
the line with me is uh alison castronovo

102
00:03:45,350 --> 00:03:43,200
uh allison how many earth cam missions

103
00:03:48,229 --> 00:03:45,360
have you participated in

104
00:03:49,589 --> 00:03:48,239
um i've participated in four earth cam

105
00:03:51,030 --> 00:03:49,599
missions this year

106
00:03:51,910 --> 00:03:51,040
for this year

107
00:03:55,350 --> 00:03:51,920
yeah

108
00:03:56,710 --> 00:03:55,360
so you've been doing it constantly

109
00:03:58,229 --> 00:03:56,720
yeah

110
00:04:00,229 --> 00:03:58,239
how do you decide

111
00:04:01,990 --> 00:04:00,239
what targets on the earth you want to

112
00:04:04,149 --> 00:04:02,000
take pictures of

113
00:04:07,509 --> 00:04:04,159

well at first i looked at google earth

114

00:04:10,390 --> 00:04:07,519

and i saw all of like the oceans and the

115

00:04:12,550 --> 00:04:10,400

beaches and i was i thought to myself

116

00:04:15,589 --> 00:04:12,560

hey that looks really cool so

117

00:04:17,270 --> 00:04:15,599

i tried to find anywhere where it was

118

00:04:18,710 --> 00:04:17,280

on a coastline

119

00:04:21,270 --> 00:04:18,720

all right well

120

00:04:23,110 --> 00:04:21,280

i got you to share one of your pictures

121

00:04:25,030 --> 00:04:23,120

with us that we can show everybody else

122

00:04:26,790 --> 00:04:25,040

right now i want to ask you to describe

123

00:04:28,469 --> 00:04:26,800

what it is that we're seeing in this in

124

00:04:33,670 --> 00:04:28,479

this picture

125

00:04:34,710 --> 00:04:33,680

coastline of new zealand

126
00:04:35,909 --> 00:04:34,720
and

127
00:04:38,950 --> 00:04:35,919
there's

128
00:04:41,510 --> 00:04:38,960
very crystal blue water and if you look

129
00:04:44,710 --> 00:04:41,520
to the to the right side of the picture

130
00:04:47,189 --> 00:04:44,720
there's a large mountain range and

131
00:04:49,110 --> 00:04:47,199
next to it a bunch of trees which

132
00:04:50,790 --> 00:04:49,120
actually when you look very close at it

133
00:04:54,950 --> 00:04:50,800
i discovered this when after i saw the

134
00:04:56,469 --> 00:04:54,960
picture there's a like a strange pattern

135
00:04:58,950 --> 00:04:56,479
in the trees

136
00:05:00,710 --> 00:04:58,960
and you can see all the detail of like

137
00:05:02,950 --> 00:05:00,720
the towns

138
00:05:05,670 --> 00:05:02,960

so it sounds as though

139

00:05:07,909 --> 00:05:05,680

you found what you were looking for

140

00:05:10,870 --> 00:05:07,919

exactly and i also found more because i

141

00:05:12,870 --> 00:05:10,880

never expected all of that detail

142

00:05:14,629 --> 00:05:12,880

very interesting let me ask you to hand

143

00:05:16,469 --> 00:05:14,639

the phone to your classmate who's uh

144

00:05:19,029 --> 00:05:16,479

who's there with you we're gonna get one

145

00:05:21,830 --> 00:05:19,039

more perspective on what it's like to be

146

00:05:23,670 --> 00:05:21,840

part of the earthkam experiment

147

00:05:26,550 --> 00:05:23,680

on the phone with us now another holland

148

00:05:28,469 --> 00:05:26,560

middle school student andrew harmon uh

149

00:05:29,749 --> 00:05:28,479

andrew how did you decide what it is you

150

00:05:31,749 --> 00:05:29,759

want to shoot

151

00:05:33,990 --> 00:05:31,759

well i decided my target when i was

152

00:05:35,670 --> 00:05:34,000

looking around on the map

153

00:05:37,830 --> 00:05:35,680

and when i saw it first i thought it was

154

00:05:39,590 --> 00:05:37,840

a small island off the coast of egypt

155

00:05:41,749 --> 00:05:39,600

but when i took a closer look i saw it

156

00:05:43,510 --> 00:05:41,759

was very rugged terrain

157

00:05:45,270 --> 00:05:43,520

so it made me think

158

00:05:47,749 --> 00:05:45,280

so i looked it up on the internet and

159

00:05:49,270 --> 00:05:47,759

found out it had volcanic activity so i

160

00:05:50,870 --> 00:05:49,280

took the picture

161

00:05:53,830 --> 00:05:50,880

now we're showing the picture to

162

00:05:55,430 --> 00:05:53,840

everyone now who's who's watching us

163

00:05:57,270 --> 00:05:55,440

and i want to ask you to describe it

164

00:05:59,830 --> 00:05:57,280

because i've looked at this now for a

165

00:06:01,510 --> 00:05:59,840

day or two and i'm really not sure what

166

00:06:04,150 --> 00:06:01,520

i'm seeing here

167

00:06:06,870 --> 00:06:04,160

well you're basically seeing

168

00:06:09,350 --> 00:06:06,880

lots of erosion from streams and stuff

169

00:06:10,870 --> 00:06:09,360

like that and

170

00:06:13,270 --> 00:06:10,880

to the left of the picture you're

171

00:06:15,110 --> 00:06:13,280

probably seeing either volcanic rock or

172

00:06:16,469 --> 00:06:15,120

plant growth to the left side of the

173

00:06:24,550 --> 00:06:16,479

island

174

00:06:25,990 --> 00:06:24,560

yeah okay

175

00:06:27,749 --> 00:06:26,000

did you

176
00:06:29,830 --> 00:06:27,759
learn

177
00:06:33,029 --> 00:06:29,840
now let me ask it a better way what did

178
00:06:35,029 --> 00:06:33,039
you learn from seeing this picture that

179
00:06:37,590 --> 00:06:35,039
you had wanted to see

180
00:06:39,430 --> 00:06:37,600
well i learned about this remote island

181
00:06:41,909 --> 00:06:39,440
off the coast of egypt

182
00:06:44,629 --> 00:06:41,919
and that there was a volcanic eruption

183
00:06:47,590 --> 00:06:44,639
on it in 1969

184
00:06:48,629 --> 00:06:47,600
and that's what it looks like now

185
00:06:50,309 --> 00:06:48,639
yeah

186
00:06:52,790 --> 00:06:50,319
great andrew thank you if you would hand

187
00:06:55,909 --> 00:06:52,800
the phone back to mr curry for just a

188
00:06:58,070 --> 00:06:55,919

moment uh dave you had told me earlier

189

00:06:59,749 --> 00:06:58,080

as we were talking that virtually all of

190

00:07:02,629 --> 00:06:59,759

your students who've taken part in earth

191

00:07:04,790 --> 00:07:02,639

can have been enthusiastic about it i

192

00:07:07,189 --> 00:07:04,800

wonder from the perspective that you

193

00:07:09,670 --> 00:07:07,199

have of seeing them both before they

194

00:07:12,150 --> 00:07:09,680

were involved in this and afterwards

195

00:07:14,550 --> 00:07:12,160

do you see that their participation has

196

00:07:16,790 --> 00:07:14,560

had a benefit for them beyond just the

197

00:07:18,070 --> 00:07:16,800

cool pictures they end up with

198

00:07:19,670 --> 00:07:18,080

absolutely

199

00:07:21,909 --> 00:07:19,680

it really

200

00:07:24,230 --> 00:07:21,919

takes away learning out of the textbook

201

00:07:27,589 --> 00:07:24,240

and makes it real to life in real world

202

00:07:29,350 --> 00:07:27,599

so when i have the students go online

203

00:07:31,589 --> 00:07:29,360

and select pictures using latitude and

204

00:07:33,670 --> 00:07:31,599

longitude sometimes they make mistakes

205

00:07:35,749 --> 00:07:33,680

and they put you know north latitude

206

00:07:37,589 --> 00:07:35,759

instead of south latitude and the earth

207

00:07:38,790 --> 00:07:37,599

cam interface is really nice it lets you

208

00:07:40,710 --> 00:07:38,800

know that there's something wrong with

209

00:07:42,629 --> 00:07:40,720

the request so

210

00:07:44,230 --> 00:07:42,639

from their mistakes they actually learn

211

00:07:46,390 --> 00:07:44,240

about latitude and longitude they learn

212

00:07:48,150 --> 00:07:46,400

about topography they learn as you as

213

00:07:50,550 --> 00:07:48,160

you've heard about erosion volcanic

214

00:07:51,749 --> 00:07:50,560

activity so it teaches them all kinds of

215

00:07:53,350 --> 00:07:51,759

things that are normally part of the

216

00:07:55,189 --> 00:07:53,360

curriculum that i would normally teach

217

00:07:57,430 --> 00:07:55,199

but it actually teaches them by doing

218

00:07:59,350 --> 00:07:57,440

which is really fantastic

219

00:08:01,510 --> 00:07:59,360

dave i want to thank you and

220

00:08:02,950 --> 00:08:01,520

allison and andrew for sharing your

221

00:08:04,230 --> 00:08:02,960

story about earth cam with us thank you

222

00:08:06,390 --> 00:08:04,240

very much

223

00:08:08,309 --> 00:08:06,400

uh and let everyone know that the the

224

00:08:10,469 --> 00:08:08,319

current earth cam mission that's been

225

00:08:12,469 --> 00:08:10,479

operating during this earth week does

226

00:08:14,869 --> 00:08:12,479

run through this weekend

227

00:08:16,550 --> 00:08:14,879

anybody can get a look at the pictures

228

00:08:18,950 --> 00:08:16,560

that have been returned by this

229

00:08:20,950 --> 00:08:18,960

investigation and teachers can find out

230

00:08:24,070 --> 00:08:20,960

more about how they can get their own

231

00:08:25,990 --> 00:08:24,080

classes involved by going online to the

232

00:08:29,150 --> 00:08:26,000

earthkam website the address that you

233

00:08:32,389 --> 00:08:31,110

earthkam.ucsd.edu that's university of

234

00:08:35,909 --> 00:08:32,399

san diego

235

00:08:38,709 --> 00:08:35,919

you can go onto their website or to the

236

00:08:40,630 --> 00:08:38,719

website for sally ride science which is

237

00:08:42,149 --> 00:08:40,640

sallyridescience.com

238

00:08:49,110 --> 00:08:42,159

the