

SPACE:  
The Next Generation

KWANZAA  
*America*

The experience  
is made possible  
by a generous  
gift from E.I. du  
Pont

1  
00:00:17,260 --> 00:00:15,529  
in the following few minutes you will

2  
00:00:20,330 --> 00:00:17,270  
learn about an exciting educational

3  
00:00:23,569 --> 00:00:20,340  
program hosted at the NASA Lewis

4  
00:00:26,720 --> 00:00:23,579  
Research Center in Cleveland Ohio it's

5  
00:00:28,939 --> 00:00:26,730  
called new West NASA's educational

6  
00:00:32,749 --> 00:00:28,949  
workshops for elementary school teachers

7  
00:00:36,799 --> 00:00:32,759  
the United States is training scientists

8  
00:00:38,720 --> 00:00:36,809  
and engineers foreign-born seven out of

9  
00:00:41,079 --> 00:00:38,730  
every 10 and the colleges and

10  
00:00:44,270 --> 00:00:41,089  
universities were from a foreign land

11  
00:00:47,359 --> 00:00:44,280  
the remaining three out of ten were from

12  
00:00:51,320 --> 00:00:47,369  
the United States it told me that our

13  
00:00:53,869 --> 00:00:51,330

educational system cannot be poor but

14  
00:00:56,750 --> 00:00:53,879  
we're making a mistake someplace and we

15  
00:00:58,939 --> 00:00:56,760  
need to turn kids on and it has to be

16  
00:01:02,630 --> 00:00:58,949  
early in their school life by the third

17  
00:01:05,149 --> 00:01:02,640  
or fourth grade or we've lost them the

18  
00:01:08,300 --> 00:01:05,159  
teachers here that participated in the

19  
00:01:10,520 --> 00:01:08,310  
newest program are special they've been

20  
00:01:13,280 --> 00:01:10,530  
in the program that less than 100

21  
00:01:15,350 --> 00:01:13,290  
teachers have had at Louis and I should

22  
00:01:17,320 --> 00:01:15,360  
clarify that by saying elementary

23  
00:01:20,570 --> 00:01:17,330  
science teachers have had it Louis

24  
00:01:24,380 --> 00:01:20,580  
newest program has only been in

25  
00:01:29,030 --> 00:01:24,390  
existence for three years and so this is

26

00:01:33,790 --> 00:01:29,040

a very small select group within the

27

00:01:36,500 --> 00:01:33,800

United States it was developed to

28

00:01:39,469 --> 00:01:36,510

disseminate knowledge in aerospace

29

00:01:43,399 --> 00:01:39,479

education down into the lower grades

30

00:01:47,050 --> 00:01:43,409

where we need to turn the kid on you

31

00:01:51,020 --> 00:01:47,060

uniquely have the ability to go and

32

00:01:54,020 --> 00:01:51,030

motivate excite touch so many children

33

00:01:56,600 --> 00:01:54,030

at the age when they are in their

34

00:01:59,120 --> 00:01:56,610

formative stages in particular in things

35

00:02:01,460 --> 00:01:59,130

like getting into interested in science

36

00:02:03,440 --> 00:02:01,470

and math and technology where this

37

00:02:05,899 --> 00:02:03,450

country as you know as well as I has

38

00:02:07,730 --> 00:02:05,909

gone downhill I'll say in the number of

39

00:02:10,070 --> 00:02:07,740

last year's and people being kids being

40

00:02:11,960 --> 00:02:10,080

interested in that and it's at the age

41

00:02:15,380 --> 00:02:11,970

of kids with you're associating with

42

00:02:17,390 --> 00:02:15,390

where they really i believe makeup they

43

00:02:20,270 --> 00:02:17,400

may not make up their minds but if they

44

00:02:21,980 --> 00:02:20,280

don't get some type of interest

45

00:02:24,020 --> 00:02:21,990

in their heart for this they're never

46

00:02:25,570 --> 00:02:24,030

going to pick it up later it's unlikely

47

00:02:29,360 --> 00:02:25,580

that you're gonna pick it up later and

48

00:02:32,840 --> 00:02:29,370

so it's critical for in a very parochial

49

00:02:35,290 --> 00:02:32,850

sense for the future of the space

50

00:02:37,550 --> 00:02:35,300

program for you to go out and do what

51  
00:02:41,180 --> 00:02:37,560  
what we'd like you to do as a result of

52  
00:02:43,250 --> 00:02:41,190  
this program to turn our students on to

53  
00:02:46,490 --> 00:02:43,260  
help them dream of reaching for the

54  
00:02:49,250 --> 00:02:46,500  
unknown to motivate them to go the extra

55  
00:02:51,620 --> 00:02:49,260  
distance these are some of the

56  
00:02:55,520 --> 00:02:51,630  
challenges facing teachers in America's

57  
00:02:57,740 --> 00:02:55,530  
schools today with recent surveys and

58  
00:02:59,720 --> 00:02:57,750  
studies showing that American students

59  
00:03:02,630 --> 00:02:59,730  
are falling behind the rest of the

60  
00:03:05,960 --> 00:03:02,640  
industrialized world in the areas of

61  
00:03:08,330 --> 00:03:05,970  
mathematics and the hard sciences nASA

62  
00:03:11,270 --> 00:03:08,340  
has taken an increased interest in

63  
00:03:15,110 --> 00:03:11,280

trying to reach these children through

64  
00:03:18,559 --> 00:03:15,120  
various workshops seminars and unsigned

65  
00:03:19,910 --> 00:03:18,569  
help sessions NASA in conjunction with

66  
00:03:22,940 --> 00:03:19,920  
the National Science Teachers

67  
00:03:25,640 --> 00:03:22,950  
Association and the National Council of

68  
00:03:28,069 --> 00:03:25,650  
teachers of mathematics is attempting to

69  
00:03:30,350 --> 00:03:28,079  
get the educators excited about space

70  
00:03:33,259 --> 00:03:30,360  
and to get space theme related

71  
00:03:36,259 --> 00:03:33,269  
curriculum integrated into the daily

72  
00:03:38,780 --> 00:03:36,269  
lesson plans of these teachers NASA

73  
00:03:41,120 --> 00:03:38,790  
supports two programs which bring the

74  
00:03:43,630 --> 00:03:41,130  
teachers to its centers for two weeks of

75  
00:03:47,390 --> 00:03:43,640  
intensive hands-on learning and training

76  
00:03:50,180 --> 00:03:47,400  
these two programs new mass NASA

77  
00:03:52,970 --> 00:03:50,190  
educational workshops for math science

78  
00:03:56,180 --> 00:03:52,980  
and technology teachers and new West

79  
00:04:00,110 --> 00:03:56,190  
NASA educational workshop for elementary

80  
00:04:03,020 --> 00:04:00,120  
school teachers involve about 200 select

81  
00:04:07,810 --> 00:04:03,030  
educators out of the thousands that

82  
00:04:11,150 --> 00:04:07,820  
apply each year each NASA Center hosts

83  
00:04:14,479 --> 00:04:11,160  
22-24 educators and neither new master

84  
00:04:17,779 --> 00:04:14,489  
new West new mast works with secondary

85  
00:04:20,029 --> 00:04:17,789  
science and math teachers while newest

86  
00:04:22,790 --> 00:04:20,039  
concentrates getting elementary school

87  
00:04:25,700 --> 00:04:22,800  
teachers motivated and excited about

88  
00:04:28,310 --> 00:04:25,710

teaching their students math and science

89

00:04:32,089 --> 00:04:28,320

and incorporating the aspects of the

90

00:04:34,100 --> 00:04:32,099

space program into their lessons during

91

00:04:36,770 --> 00:04:34,110

the summer of nineteen ninety

92

00:04:40,700 --> 00:04:36,780

the Lewis Research Center in Cleveland

93

00:04:43,400 --> 00:04:40,710

Ohio played host to 22 educators in the

94

00:04:46,480 --> 00:04:43,410

newest program I'm really kind of proud

95

00:04:50,780 --> 00:04:46,490

of you be part of a program that helps

96

00:04:52,670 --> 00:04:50,790

our elementary school teachers do the

97

00:04:54,920 --> 00:04:52,680

difficult job that you all know better

98

00:05:00,020 --> 00:04:54,930

are better than I do what you do it's

99

00:05:01,850 --> 00:05:00,030

awfully important for the nation to do

100

00:05:04,280 --> 00:05:01,860

what you're doing you know or we have an

101  
00:05:09,110 --> 00:05:04,290  
administrator who's the head of NASA

102  
00:05:12,110 --> 00:05:09,120  
who's absolutely committed to using NASA

103  
00:05:14,810 --> 00:05:12,120  
which has kind of a unique charm or

104  
00:05:17,420 --> 00:05:14,820  
unique appeal i think to our young the

105  
00:05:20,270 --> 00:05:17,430  
astronauts and flying and all that sort

106  
00:05:23,010 --> 00:05:20,280  
stuff that really does capture them i

107  
00:05:28,090 --> 00:05:26,020  
captures them and maybe even coops than

108  
00:05:29,890 --> 00:05:28,100  
just a little bit into doing some of the

109  
00:05:31,870 --> 00:05:29,900  
tougher coursework that they would

110  
00:05:35,350 --> 00:05:31,880  
otherwise opted not to do pay attention

111  
00:05:37,210 --> 00:05:35,360  
to the man in the science I agree with

112  
00:05:39,970 --> 00:05:37,220  
our administrator that you know it's

113  
00:05:42,730 --> 00:05:39,980

really a unique opportunity for this for

114

00:05:44,770 --> 00:05:42,740

NASA as a national arm civil space

115

00:05:46,720 --> 00:05:44,780

program so whatever nice program to use

116

00:05:49,030 --> 00:05:46,730

all the leverage that we can bring

117

00:05:51,100 --> 00:05:49,040

unique things that we can bring to make

118

00:05:52,810 --> 00:05:51,110

make that sort of thing happen in any

119

00:05:57,420 --> 00:05:52,820

way we can help you all who really are

120

00:06:04,180 --> 00:06:00,490

we really want to do to be partners

121

00:06:06,370 --> 00:06:04,190

popular as the program began these 22

122

00:06:10,150 --> 00:06:06,380

educators found themselves back in

123

00:06:14,980 --> 00:06:10,160

school again 14 days of intense hands-on

124

00:06:17,680 --> 00:06:14,990

learning lecturing field trips this time

125

00:06:19,990 --> 00:06:17,690

together gave the educators a chance to

126

00:06:21,760 --> 00:06:20,000

grow together and to develop deep

127

00:06:25,330 --> 00:06:21,770

friendships as well as grow

128

00:06:30,160 --> 00:06:25,340

intellectually the emotional impact is

129

00:06:32,710 --> 00:06:30,170

something that can be replicated so I

130

00:06:33,940 --> 00:06:32,720

guess for me the emotional thing is

131

00:06:35,530 --> 00:06:33,950

something of these two weeks is

132

00:06:38,190 --> 00:06:35,540

something that I'm really going to is

133

00:06:47,990 --> 00:06:38,200

really going to stay with me for that

134

00:06:58,370 --> 00:06:55,580

I really want piggyback you what Ben

135

00:07:00,050 --> 00:06:58,380

it's just that says the personal contact

136

00:07:02,150 --> 00:07:00,060

was going to be really something I'm

137

00:07:04,400 --> 00:07:02,160

going to remember and I really thank you

138

00:07:07,250 --> 00:07:04,410

for all the local materials and I will

139

00:07:08,900 --> 00:07:07,260

definitely be able to dispense to at

140

00:07:11,360 --> 00:07:08,910

least 125

141

00:07:14,060 --> 00:07:11,370

you should be here

142

00:07:17,300 --> 00:07:14,070

the first day of newest was a time for

143

00:07:20,090 --> 00:07:17,310

everybody to get acquainted get situated

144

00:07:24,020 --> 00:07:20,100

and get brought up to speed on what they

145

00:07:26,360 --> 00:07:24,030

could expect in a talk by Pam bacon from

146

00:07:29,330 --> 00:07:26,370

NASA headquarters educational programs

147

00:07:33,379 --> 00:07:29,340

office the teachers were told what NASA

148

00:07:36,830 --> 00:07:33,389

hope to gain in return Caroline Benson

149

00:07:40,070 --> 00:07:36,840

of nsta space science and technology

150

00:07:42,650 --> 00:07:40,080

division gave a presentation about nsta

151  
00:07:46,450 --> 00:07:42,660  
and other programs the organization has

152  
00:07:49,159 --> 00:07:46,460  
to offer teachers then the work began

153  
00:07:51,650 --> 00:07:49,169  
with group lectures every morning by

154  
00:07:54,560 --> 00:07:51,660  
John hartsville aerospace educational

155  
00:07:57,020 --> 00:07:54,570  
specialist hartsville talked and a range

156  
00:08:00,290 --> 00:07:57,030  
of subjects in the fields of Aeronautics

157  
00:08:03,050 --> 00:08:00,300  
and aerospace the history of flight the

158  
00:08:05,360 --> 00:08:03,060  
solar system the space shuttle and

159  
00:08:08,750 --> 00:08:05,370  
eating and sleeping in space to name a

160  
00:08:11,300 --> 00:08:08,760  
few he also had some materials to let

161  
00:08:45,540 --> 00:08:11,310  
the teachers see for themselves what it

162  
00:08:50,310 --> 00:08:48,070  
additionally hartsville introduced some

163  
00:08:52,750 --> 00:08:50,320

simple projects which illustrated

164

00:08:55,030 --> 00:08:52,760

aerodynamic concepts that could be used

165

00:08:58,840 --> 00:08:55,040

in the classroom using inexpensive

166

00:09:02,140 --> 00:08:58,850

supplies your host gave talks on

167

00:09:04,870 --> 00:09:02,150

motivating students projects to be used

168

00:09:12,180 --> 00:09:04,880

in the classroom reviewed common Hallie

169

00:09:18,480 --> 00:09:16,090

right see if nectar ok see you next on I

170

00:09:21,610 --> 00:09:18,490

guarantee you can see every one of these

171

00:09:24,640 --> 00:09:21,620

outside and introduce them to different

172

00:09:27,730 --> 00:09:24,650

projects on how to incorporate everyday

173

00:09:37,140 --> 00:09:27,740

things into space science related topics

174

00:09:42,970 --> 00:09:37,150

so take 344 514 so if you'll divide your

175

00:09:45,340 --> 00:09:42,980

344,000 by 16 that'll tell you how much

176

00:09:47,860 --> 00:09:45,350

to your loaf ways the newest

177

00:09:50,560 --> 00:09:47,870

participants afternoon were filled with

178

00:09:54,690 --> 00:09:50,570

tours of various facilities on the Lewis

179

00:09:58,390 --> 00:09:54,700

grounds the icing research tunnel

180

00:10:00,870 --> 00:09:58,400

propulsion systems laboratory engines

181

00:10:02,910 --> 00:10:00,880

make their thrust by taking air

182

00:10:04,980 --> 00:10:02,920

put in front of them and pretty low

183

00:10:07,100 --> 00:10:04,990

speed and throwing out the back as fast

184

00:10:09,300 --> 00:10:07,110

as they can throw it out the back and

185

00:10:12,930 --> 00:10:09,310

they do it by pumping it through there

186

00:10:25,530 --> 00:10:12,940

and you do it by eating the zero-gravity

187

00:10:34,460 --> 00:10:29,350

and the hangar where the research

188

00:10:38,600 --> 00:10:36,320

we always tell the people since we fly

189

00:10:40,880 --> 00:10:38,610

in an urban area we give them an Ohio

190

00:10:44,000 --> 00:10:40,890

Bell card a mastercard cassette on their

191

00:10:45,770 --> 00:10:44,010

way there were also group activities

192

00:10:48,230 --> 00:10:45,780

where the teachers got hands-on

193

00:10:50,780 --> 00:10:48,240

experience with projects for classroom

194

00:10:54,260 --> 00:10:50,790

and breakout groups to give energy to

195

00:10:56,330 --> 00:10:54,270

the orbiter the momentum it's staying

196

00:10:58,610 --> 00:10:56,340

down here it's a smaller bounce and then

197

00:11:00,830 --> 00:10:58,620

children work with the weight larger

198

00:11:02,570 --> 00:11:00,840

heavier how much farther is it going to

199

00:11:04,610 --> 00:11:02,580

go and we start doing predictions and

200

00:11:07,910 --> 00:11:04,620

don't forget to tell your students there

201  
00:11:13,070 --> 00:11:07,920  
were no wrong answers in science on

202  
00:11:14,630 --> 00:11:13,080  
oohing unexpected results so watch again

203  
00:11:16,850 --> 00:11:14,640  
just the ball part I'll watch the

204  
00:11:20,900 --> 00:11:16,860  
orbiter so it doesn't here we go to the

205  
00:11:23,150 --> 00:11:20,910  
fire breakout groups consisted of six to

206  
00:11:25,400 --> 00:11:23,160  
eight teachers working on various

207  
00:11:27,350 --> 00:11:25,410  
projects which were then shared with the

208  
00:11:30,080 --> 00:11:27,360  
rest of the teachers during the last

209  
00:11:33,710 --> 00:11:30,090  
days of the workshop the group's worked

210  
00:11:37,460 --> 00:11:33,720  
with a leader your host John hartsfield

211  
00:11:44,500 --> 00:11:37,470  
and Richard Kuna a NASA physicist the

212  
00:11:53,960 --> 00:11:48,700  
as I described some behavior of light

213  
00:11:56,990 --> 00:11:53,970

reflection comet halley what it really

214

00:11:58,730 --> 00:11:57,000

is in order for them to measure the risk

215

00:12:08,840 --> 00:11:58,740

of the large living on Space Station

216

00:12:12,250 --> 00:12:08,850

freedom and Donna Watson with NASA pilot

217

00:12:15,380 --> 00:12:12,260

bill Ricky on her experience in the t-34

218

00:12:18,110 --> 00:12:15,390

this plane is used by NASA Lewis in

219

00:12:20,600 --> 00:12:18,120

aerospace projects in conjunction with

220

00:12:24,350 --> 00:12:20,610

local high schools and the office of

221

00:12:26,140 --> 00:12:24,360

educational programs one day the group

222

00:12:28,220 --> 00:12:26,150

got to tour the Federal Aviation

223

00:12:31,700 --> 00:12:28,230

Administration's facilities at the

224

00:12:33,800 --> 00:12:31,710

cleveland hopkins airport they split up

225

00:12:36,860 --> 00:12:33,810

into groups and got to go up into the

226

00:12:39,830 --> 00:12:36,870

tower the track on or terminal radar

227

00:12:42,770 --> 00:12:39,840

approach control and saw a presentation

228

00:12:45,440 --> 00:12:42,780

on careers in aeronautics another group

229

00:12:47,840 --> 00:12:45,450

project the teachers had to do was

230

00:12:50,990 --> 00:12:47,850

construct an egg survival system

231

00:12:58,610 --> 00:12:51,000

which was then tested so to speak at the

232

00:13:00,889 --> 00:12:58,620

microgravity drop tower needless to say

233

00:13:39,650 --> 00:13:00,899

some of them needed a little refinement

234

00:13:44,880 --> 00:13:42,060

but the highlight for many of the

235

00:13:46,920 --> 00:13:44,890

participants was an interactive video

236

00:13:50,190 --> 00:13:46,930

conference with astronaut story Musgrave

237

00:13:53,250 --> 00:13:50,200

and the newest group down at the Johnson

238

00:13:55,440 --> 00:13:53,260

## Space Center in Houston Texas Musgrave

239

00:13:58,110 --> 00:13:55,450

gave a slide presentation on a manned

240

00:14:00,450 --> 00:13:58,120

space flight aboard the shuttle and his

241

00:14:03,810 --> 00:14:00,460

philosophies and then took questions

242

00:14:05,760 --> 00:14:03,820

from both newest groups the activity

243

00:14:09,240 --> 00:14:05,770

left some deep impressions on the

244

00:14:11,340 --> 00:14:09,250

teachers when story spent so much time

245

00:14:14,090 --> 00:14:11,350

with a little child bent over looking

246

00:14:17,040 --> 00:14:14,100

into the sand he did that on purpose

247

00:14:18,810 --> 00:14:17,050

there was a quite a message that it was

248

00:14:20,550 --> 00:14:18,820

brought home to me and it kind of hold

249

00:14:23,370 --> 00:14:20,560

everything together that we're doing

250

00:14:24,990 --> 00:14:23,380

here and he said we can spend a lot of

251  
00:14:26,130 --> 00:14:25,000  
time and we're doing a lot of research

252  
00:14:29,670 --> 00:14:26,140  
and we're looking at things from

253  
00:14:32,520 --> 00:14:29,680  
different angles but do stop and look

254  
00:14:34,770 --> 00:14:32,530  
look at what we have right here he

255  
00:14:37,530 --> 00:14:34,780  
brought earth homes so close to me that

256  
00:14:39,570 --> 00:14:37,540  
i will look at everything around me and

257  
00:14:42,540 --> 00:14:39,580  
much a different viewpoint than i had

258  
00:14:45,660 --> 00:14:42,550  
ever done before as the two weeks ation

259  
00:14:48,780 --> 00:14:45,670  
came to a close a banquet was held for

260  
00:14:50,940 --> 00:14:48,790  
the teacher after dinner the teachers

261  
00:14:59,090 --> 00:14:50,950  
had to present their space exploration

262  
00:15:11,840 --> 00:15:05,380  
our kids from your eternity excl re SP

263  
00:15:13,880 --> 00:15:11,850

HCG was the lady her name was Flo for a

264

00:15:16,310 --> 00:15:13,890

classroom teacher who said she had to go

265

00:15:18,470 --> 00:15:16,320

so she packed up her things to move to

266

00:15:21,070 --> 00:15:18,480

Mars but little did she know she had to

267

00:15:24,650 --> 00:15:21,080

travel through the stars Cassiopeia

268

00:15:26,630 --> 00:15:24,660

Andromeda Hercules then plaques and

269

00:15:29,420 --> 00:15:26,640

certificates of participation were

270

00:15:32,140 --> 00:15:29,430

handed out and the evening clothes with

271

00:15:59,479 --> 00:15:32,150

an emotional groups signing of the song

272

00:16:16,720 --> 00:16:00,770

me

273

00:16:23,180 --> 00:16:21,170

on the final day several of the teachers

274

00:16:26,390 --> 00:16:23,190

shared their impressions of the workshop

275

00:16:28,579 --> 00:16:26,400

with Fred pavan le director of the

276

00:16:31,579 --> 00:16:28,589

administration and computer services

277

00:16:33,740 --> 00:16:31,589

Directorate the benefits of the newest

278

00:16:35,890 --> 00:16:33,750

program are incredible they will

279

00:16:38,990 --> 00:16:35,900

multiply and it is like a ripple effect

280

00:16:41,329 --> 00:16:39,000

taking the 22 teachers that have

281

00:16:42,860 --> 00:16:41,339

experienced something here at Lewis we

282

00:16:44,990 --> 00:16:42,870

will go on and spread that throughout

283

00:16:49,180 --> 00:16:45,000

the country the difference I think

284

00:16:52,730 --> 00:16:49,190

between passing out information to

285

00:16:54,620 --> 00:16:52,740

teachers at a convention meeting people

286

00:16:56,960 --> 00:16:54,630

at a symposium at a conference and

287

00:16:59,269 --> 00:16:56,970

passing out information to 20,000

288

00:17:00,920 --> 00:16:59,279

educators the chances of it really

289

00:17:04,640 --> 00:17:00,930

getting into the classroom are very slim

290

00:17:08,240 --> 00:17:04,650

and then you can take 22 teachers bring

291

00:17:10,910 --> 00:17:08,250

them to a NASA Center let them meet the

292

00:17:12,790 --> 00:17:10,920

people and all of a sudden the

293

00:17:15,439 --> 00:17:12,800

information that NASA wants to give us

294

00:17:17,840 --> 00:17:15,449

becomes a part of us and we now have a

295

00:17:20,090 --> 00:17:17,850

new ownership in it and when someone has

296

00:17:21,350 --> 00:17:20,100

an ownership in something you take that

297

00:17:23,510 --> 00:17:21,360

very personally and you will make sure

298

00:17:26,929 --> 00:17:23,520

that it is taken care of and it is given

299

00:17:28,309 --> 00:17:26,939

out to others what I have discovered in

300

00:17:31,100 --> 00:17:28,319

the two weeks that I've been here at

301

00:17:32,840 --> 00:17:31,110

Lewis is that the people of the Lewis

302

00:17:36,320 --> 00:17:32,850

research center are NASA's greatest

303

00:17:38,540 --> 00:17:36,330

resource they are tremendous these are

304

00:17:41,270 --> 00:17:38,550

professional people who treated us as

305

00:17:44,090 --> 00:17:41,280

professionals they opened their doors

306

00:17:48,169 --> 00:17:44,100

they open their minds they would listen

307

00:17:49,880 --> 00:17:48,179

to us they answered our questions I it

308

00:17:52,580 --> 00:17:49,890

was exciting for us to see the pride

309

00:17:55,000 --> 00:17:52,590

that they had in their work there was a

310

00:17:58,130 --> 00:17:55,010

one gentleman at the zero-gravity

311

00:18:00,230 --> 00:17:58,140

facility who really took pride in what

312

00:18:02,450 --> 00:18:00,240

he was doing and he gave us that sense

313

00:18:04,520 --> 00:18:02,460

of pride that we can take back to our

314

00:18:08,240 --> 00:18:04,530

classrooms I think probably this is

315

00:18:10,040 --> 00:18:08,250

singer Lee the most important activity

316

00:18:16,070 --> 00:18:10,050

in which I could have participated this

317

00:18:18,350 --> 00:18:16,080

summer it was not only an exciting and

318

00:18:20,330 --> 00:18:18,360

productive experience to visit the

319

00:18:22,880 --> 00:18:20,340

laboratories to meet with the people

320

00:18:25,820 --> 00:18:22,890

they have an opportunity to ask

321

00:18:26,960 --> 00:18:25,830

questions of them I was particularly

322

00:18:29,270 --> 00:18:26,970

impressed with

323

00:18:33,620 --> 00:18:29,280

dedication to what they're doing and our

324

00:18:37,070 --> 00:18:33,630

enthusiasm for it but I also gained much

325

00:18:39,620 --> 00:18:37,080

from the outstanding elementary school

326

00:18:42,289 --> 00:18:39,630

teachers that were involved in this

327

00:18:45,020 --> 00:18:42,299

two-week newest workshop these are

328

00:18:48,260 --> 00:18:45,030

really incredible people they not only

329

00:18:54,250 --> 00:18:48,270

talk shop during the time that they were

330

00:18:57,230 --> 00:18:54,260

at the Lewis facility they talked shop

331

00:18:59,419 --> 00:18:57,240

16 hours a day and that may be a

332

00:19:02,960 --> 00:18:59,429

conservative estimate because that was

333

00:19:06,409 --> 00:19:02,970

only during the times that I saw them so

334

00:19:08,630 --> 00:19:06,419

I gained many ideas on teaching science

335

00:19:11,840 --> 00:19:08,640

and math elementary school-aged children

336

00:19:14,899 --> 00:19:11,850

I gained much from my colleagues in the

337

00:19:16,820 --> 00:19:14,909

workshop I gained much from the leaders

338

00:19:19,310 --> 00:19:16,830

of the workshop not only what they were

339

00:19:21,890 --> 00:19:19,320

willing to share with us but the

340

00:19:24,560 --> 00:19:21,900

modeling they did in terms of their

341

00:19:26,720 --> 00:19:24,570

enthusiasm for the whole space program

342

00:19:29,480 --> 00:19:26,730

following their visit to Lewis research

343

00:19:31,399 --> 00:19:29,490

center the newest teachers are supported

344

00:19:34,940 --> 00:19:31,409

and followed up on through the year by

345

00:19:38,029 --> 00:19:34,950

Anita so Lars NASA newest coordinator at

346

00:19:39,770 --> 00:19:38,039

Lewis Research Center the participants

347

00:19:42,110 --> 00:19:39,780

are mailed updates and follow-up

348

00:19:44,330 --> 00:19:42,120

materials and are called twice a month

349

00:19:47,360 --> 00:19:44,340

in an effort to see how their new

350

00:19:48,980 --> 00:19:47,370

curriculum is working if you are

351

00:19:51,980 --> 00:19:48,990

interested in learning more about the

352

00:19:54,440 --> 00:19:51,990

newest our new mass programs please

353

00:19:58,490 --> 00:19:54,450

write National Science Teachers

354

00:20:03,700 --> 00:19:58,500

Association space science and technology