



KateLyn, 12th Grade
West Virginia

KateLyn Gillis
12th Grade Science Fair Participant
November 2014
2014 West Virginia Regional
Science Fair

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00:00:00,880 --> 00:00:04,320

Hi. I'm Michelle Handleman, I'm at the Visitors Center here at NASA's Goddard

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00:00:04,320 --> 00:00:07,460

Space Flight Center and inside we have a big science fair happening

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00:00:07,460 --> 00:00:10,520

that's part of the GLOBE program. Let's go inside and meet some of the

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00:00:10,540 --> 00:00:14,560

participants. [music]

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00:00:18,680 --> 00:00:22,740

So the GLOBE program has been around for a very long time and students have these scientific

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00:00:22,760 --> 00:00:26,830

protocols that are standardized across the whole world. But there's been

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00:00:26,850 --> 00:00:30,840

I think a missing element. This opportunity to showcase their work

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00:00:30,860 --> 00:00:34,860

in a competitive environment through like a science fair competition. And so that's what we're holding here today

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00:00:34,880 --> 00:00:38,880

The first in a series of regional science fair competitions funded by the

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00:00:38,900 --> 00:00:43,420

National Science Foundation and organized in collaboration with the GLOBE program office.

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00:00:43,420 --> 00:00:46,980

All right well your project was finding out if animals are safer

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00:00:47,000 --> 00:00:51,060

under the snow. Tell me about that? Usually we have a lot more

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00:00:51,080 --> 00:00:55,160

snow than we did this year. So we wanted to see how the little animals

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00:00:55,180 --> 00:00:59,270

survive during the cold winters. And we knew that

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00:00:59,290 --> 00:01:02,290

snow insulated because we were reading articles that our teacher gave us.

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00:01:02,290 --> 00:01:08,400

We tested dissolved oxygen and PH and we found out that

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00:01:08,420 --> 00:01:12,410

e coli levels are really unsafe for our community. Before this I had

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00:01:12,430 --> 00:01:16,440

no idea how bad the water actually was. The e coli is an absurd amount

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00:01:16,460 --> 00:01:20,480

it's well over the safe drinking and swimming level and we still have kids

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00:01:20,500 --> 00:01:24,560

playing in it and animals drinking from it. What's it like knowing

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00:01:24,580 --> 00:01:28,660

that NASA scientists are interested in this kind of work? I think it's

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00:01:28,680 --> 00:01:32,820

so cool. I've never really met a NASA scientist before

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00:01:32,820 --> 00:01:38,660

I haven't really met that many scientists ever actually and it's really cool just to experience this. It's

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00:01:38,690 --> 00:01:42,690

very exciting knowing that people that are very high in science

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00:01:42,710 --> 00:01:46,720

that do a lot of science for their job, their work are actually

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00:01:46,740 --> 00:01:50,820

interested in three kids from Deerfield. Has working on this

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00:01:50,840 --> 00:01:54,840

GLOBE project inspired you to study science

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00:01:54,860 --> 00:01:58,920

engineering, math in college? Yeah it's definitely opened my eyes

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00:01:58,940 --> 00:02:02,970

to different, like to broader terms of science. Like science doesn't have to just

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00:02:02,990 --> 00:02:07,030

be like, there's not just form of science. There's so many different horizons to it.

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00:02:07,050 --> 00:02:11,090

I've always wanted to do math and I've loved it. But just being here I've found

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00:02:11,110 --> 00:02:15,120

that there are jobs for mathematicians at NASA

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00:02:15,140 --> 00:02:19,190

you don't just have to major in science to be here. Why was this project

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00:02:19,210 --> 00:02:23,270

important to you personally? After starting to do the project

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00:02:23,290 --> 00:02:27,380

after realizing what an impact we make on the water, I realized that

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00:02:27,400 --> 00:02:31,390

I actually needed to take a stand to make the water safer.

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00:02:31,410 --> 00:02:35,430

For me I own five horses and so all of this manure and all of this

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00:02:35,450 --> 00:02:39,460

continuous nasty is running into our water. All the work these students are doing

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00:02:39,480 --> 00:02:43,490

are feeding into a database that's accessed by NASA scientists

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00:02:43,510 --> 00:02:47,540

and other scientists around the world. We can't predict what kind of jobs these students will be

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00:02:47,560 --> 00:02:51,600

competing for. So we have to prepare them as best we can to compete

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00:02:51,620 --> 00:02:55,670

in an environment that is a big mystery. And so making sure they have

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00:02:55,690 --> 00:02:59,750

the best skillsets to earn the best paying jobs and also to