

# NASA STEM Gateway Evaluation Surveys

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## EVALUATION SURVEYS

### 1. Welcome Page and Instructions

#### 1. Educators and Facilitators will be provided the welcome page and instructions

Instructions: As an instructor of a recently completed NASA & US Department of Education 21st Century Community Learning Collaboration Phase 4 Engineering Design Challenge (EDC) Activity, we are asking that you take part in this questionnaire to evaluate your experiences with the NASA EDC you instructed. Your answers to these questions will help us learn more about the activity, including what worked well and what we may improve on. Please complete the questions on this survey to the best of your ability. This survey is voluntary. You do not have to take the survey or answer any questions you do not want to. Also, your responses are confidential, meaning that your name will never be tied to your responses and no one will know how you responded to these questions.

We also want to validate the estimate for how long it takes to complete this survey. Therefore, we ask that you please note the time that you start this survey because we will ask at the end how long it took to complete this survey.

Thank you very much for your help!

If you wish to participate in this survey, please continue.

Privacy Notice: This is an official NASA application hosted on SurveyMonkey.com. This is not a government application, the application is controlled and operated by a third party. NASA's Web Privacy Policy does not apply to this application. NASA will not maintain, use, or share Personally Identifiable Information (PII) that becomes available through the use of this third-party application unless expressly stated and consent is obtained from the user. For additional information on NASA's Third-Party Privacy Notice please go to [http://www.nasa.gov/about/highlights/HP\\_Privacy.html](http://www.nasa.gov/about/highlights/HP_Privacy.html).

Paperwork Reduction Act Statement: This information collection meets the requirements of 44 U.S.C. §3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is XXXX-XXXX and expires DD/MM/YYYY. We estimate that it will take 20 minutes to read the instructions and answer the questions. Send only comments relating to this time estimate to: [insertaddress@nasa.gov](mailto:insertaddress@nasa.gov).

**2. Student and Educator Respondents can decide if they would like to continue on with the survey. If the respondent chooses not to participate, the system will stop the survey at this point and will prevent them from moving forward. If they choose to participate in the survey, the system will route the respondent forward to the relevant survey questions.**

★ Do you agree to participate in this survey?

Select an answer choice from the list

Pick one

Previous Next

Pick one

Pick one

Yes, I agree to participate in this survey

No, I do not wish to participate in this survey

Thank you very much for your participation in this survey!

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## 2. Educator Feedback Form (Post Implementation Survey) - Survey Questions

1. Time Started.

2. Enter your state's initials.

3. Enter your unique identifier number (UIN).

4. What is the name of the site where the NASA EDC was implemented?

*First, we'd like to ask some question about the NASA Engineering Design Challenge (EDC)*

5. Did you instruct the current NASA EDC? (Select all that apply)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Parachuting onto Mars   | <input type="checkbox"/> Mission to Mars | <input type="checkbox"/> Lunar Water                    |
| <input type="checkbox"/> Why Pressure Suits?     | <input type="checkbox"/> Space Travel    | <input type="checkbox"/> Astro Socks                    |
| <input type="checkbox"/> Packing up for the Moon | <input type="checkbox"/> Let It Glide    | <input type="checkbox"/> <a href="#">Non Applicable</a> |
| <input type="checkbox"/> Spacecraft Safety       |  |   |

6. Has your site previously implemented a NASA EDC? (Select One).

- Yes, at this site.
- No, not at this site but in other sites in the district/community.
- No, this is our first NASA EDC at this site and/or district/community.
- I Don't Know

7. Have you taught a NASA EDC? (Select One)

- Yes
- No

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8. Have you instructed any previous NASA EDC prior to this academic school year? (Select all that apply).

- Parachuting onto Mars
- Why Pressure Suits
- Packing Up for the Moon
- Spacecraft Safety
- Mission to Mars
- Space Travel
- Let It Glide
- No, I have not instructed previous NASA EDCs.

9. How was the NASA EDC selected? (Select One)

- Chosen by students
- Assigned to students

10. Please rate the extent to which you agree with the following statements regarding the professional development training you received on the NASA EDC.

	Strongly Disagree	Disagree	Agree	Strongly Agree
The training materials (i.e., facilitation guide) met my needs to successfully implement the NASA EDC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The DoS Program Planning Tool and Training Handbook met my needs to successfully implement the NASA EDC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Y4Y website and associated resources met my need to successfully implement the NASA EDC.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, the training met my needs to successfully implement the NASA EDC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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*Next, we'd like for you to rate your comfort and knowledge level for teaching STEM topics.*

11. How knowledgeable are you **NOW** in the following STEM topics?

	Not at all Knowledgeable	Slightly Knowledgeable	Knowledgeable	Very Knowledgeable
Science	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. *Next, we'd like for you to rate your comfort and knowledge level for teaching STEM topics.*

How comfortable were you in teaching the following STEM areas?

	Very Uncomfortable	Slightly Uncomfortable	Slightly Comfortable	Very Comfortable
Science	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. *Next, we'd like to ask about your beliefs in your STEM teaching efficacy.*

Please indicate the degree to which you agree with each statement below

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	Strongly Disagree	Disagree	Agree	Strongly Agree
I am continually finding better ways to teach science/engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even when I try very hard, I do not teach science/engineering as well as I do other subjects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know the steps necessary to teach science/engineering concepts effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not effective in monitoring science/engineering experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I generally teach science/engineering ineffectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand science/engineering concepts well enough to be effective in teaching science or engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to explain to students why science/experiments work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am typically able to answer students' science/engineering questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wonder if I have the necessary skills to teach science/engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Given a choice, I would not invite the principal to evaluate my science/engineering teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	Strongly Disagree	Disagree	Agree	Strongly Agree
When a student has difficulty understanding a science/engineering concept, I am usually at a loss to how to help the student understand it better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When teaching science/engineering, I usually welcome student questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not know what to do to turn students on to science/engineering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Next, we'd like to ask you about your experiences with the NASA EDC professional development training? (Select One).

Did you attend a professional development training? (Select one)

- Yes
- No (Skip to #16)

15. As you reflect on the professional development training, did the training provide you with the information and technical support to implement the NASA EDC.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree
- Not Applicable

16. Did you follow the training protocols/guidelines in implementing the NASA EDC? Select One.

- Strongly Disagree
- Disagree
- Agree

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17. Did you have any technical assistant issues with the NASA scientist or engineer (sometimes called subject matter experts or SMEs)?

- N/A I did not try to communicate with SME
- Yes
- No

18. Additionally, please let us know what was successful about your implementation of the NASA EDC, what challenges you faced, and what you would change about the training and the activity to make it more successful in the future.

Please describe what was successful about your implementation of the NASA EDC.

19. We would like to ask some questions about you.

Are you....(Select only one).

- Female
- Male

20. Are you Hispanic or Latino/Latina?

- Yes
- No

21. What is your Race (one or more categories may be selected)?

- American Indian or Alaska Native
- Native Hawaiian or [other](#) Pacific Islander
- Asian
- White or Caucasian
- Black or African American

22. Are you...[\(Select only one\).](#)

- Formal Educator (Certification and/or experience teaching in K-12 schools)
- Informal Educator (Experience teaching in Out-of-School Time Settings and/or non-K-12 schools)
- Pre-Service Educator and/or Volunteer (Educator in training or assist Formal/Informal Educator)
- Administrator (State Education Agency)
- Other (e.g. Community Partner/Volunteer)



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23. Do you have a teaching experience/background in STEM?

- Yes (Teaching math/science, STEM-related careers, etc.)
- No

24. How long have you taught STEM-related classes?

- Never
- 0 to 1 year
- 1 to 5 years
- 5 to 10 years
- Over 10 years

25. Next, we'd like to ask you about your experiences with the NASA EDC professional development webinars.

Please rate the extent to which you agree with the following statement:

The webinar(s) met my needs to successfully implement the NASA EDC.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree
- Not Applicable

26. Did you attend a professional development webinar? (Select one).

- Yes
- No

27. What suggestions do you have for successfully implementing the NASA EDC in the future (e.g., changes in training, content, structure, etc.)?

28. Please describe any challenges you had implementing the NASA EDC.

29. Do you have any additional comments or feedback on the instructions, questions, or survey navigation?

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30. Next, we'd like to ask you about your experiences with student attendance.  
How many sessions [in days] did it take for you to deliver the NASA EDC content?

31. How long [minutes] did a typical NASA EDC session take?

32. Enter the total number of students' gender participation.

- Female  
 Male  
 Total Number of Students

33. Enter the total number of students by grade level at the beginning of implementation.

- 3<sup>rd</sup> graders     6<sup>th</sup> graders     Other grades  
 4<sup>th</sup> graders     7<sup>th</sup> graders  
 5<sup>th</sup> graders     8<sup>th</sup> graders

34. Enter the total number of students who completed 80 percent or more of the NASA EDC by the end of implementation.

- 3<sup>rd</sup> graders     6<sup>th</sup> graders     Other grades  
 4<sup>th</sup> graders     7<sup>th</sup> graders  
 5<sup>th</sup> graders     8<sup>th</sup> graders

35. To the best of your knowledge, what were the reasons why students stopped attending and participating in the NASA EDC.

## Facilitator Confidence

We would like you to share with us how confident you are instructing and motivating students NOW following the Professional Development Training in the NASA and U.S. Department of Education 21st Century Learning Centers Of-School-Time 21st CCLC. As a facilitator, we would like you to rate how confident you are in achieving the following by indicating a probability of success from 0 (no chance) to 100 (complete certainty). You may assign ANY number between 0 and 100 as your probability. Rate how confident you are in achieving the following by indicating a probability of success from 0 (no chance) to 100 (complete certainty) on the following questions.

36. I am \_\_\_confident that I can facilitate the use of the Engineering Design Process to support youth learning.

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37. I am \_\_\_\_\_ confident that I can facilitate the use of Subject Matter Experts to support youth learning.

38. I am \_\_\_\_\_ confident that I can use the Supporting Science Investigation Exercises to promote youth critical thinking and problem-solving strategies.

39. I am \_\_\_\_\_ confident that I can use the Engineering Design Challenges to promote youth critical thinking and problem-solving strategies.

40. I am \_\_\_\_\_ confident that I can use the Engineering Design Process to promote youth critical thinking and problem-solving strategies.

41. I am \_\_\_\_\_ confident that I can teach the Engineering Design Process to youth.

42. I am \_\_\_\_\_ confident that I can assist youth in understanding real-world applications of STEM-related technologies.

43. I am \_\_\_\_\_ confident that I can keep youth engaged and motivated to complete the Engineering Design Process lessons.

44. I am \_\_\_\_\_ confident that I can assist youth in learning and/or applying basic science, mathematics, technology and/or engineering concepts and skills necessary to complete the Engineering Design Challenges.

45. I am \_\_\_\_\_ confident that I can encourage positive youth attitudes towards Science, Technology, Engineering, and Mathematics.

46. I am \_\_\_\_\_ confident that I can assist youth who are having trouble mastering specific Engineering Design Process elements.

47. I am \_\_\_\_\_ confident that I can explain the importance of using the Engineering Design Process elements in education.

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48. I am \_\_\_\_\_confident that I can help youth determine what modifications are needed for them to successfully complete an Engineering Design Challenge.

49. I am \_\_\_\_\_confident that I can encourage youth to pursue careers in Science, Technology, Engineering and Mathematics.

50. I am \_\_\_\_\_confident that I can encourage youth to see the value of learning Science, Technology, Engineering and Mathematics.

51. Did you train others at your site to the lead the course?

Yes

No

52. Time Finished

**Thank you for participating in this survey!**