Student Interest in Science, Technology and Geospatial Technology (STEM-GEO) Survey

In this survey, you will be asked to share your ideas about science, technology, and geospatial technologies. For the purpose of this survey, we use these terms in the following ways.

<u>Science</u> represents fields of study that focus on exploring the natural world. Science-related disciplines include Earth and environmental sciences, biology, chemistry and physics as well as applied fields such as engineering.

<u>Technology</u> represents any electronic or computer-based devices or systems. Examples might include computers, tablets, mobile phones, augmented reality glasses, or the Internet.

<u>Geospatial technologies</u> are computer-based tools that display Earth's features with thematic layers. Geographic Information Systems (GIS) and Google Earth are examples of geospatial technologies. They have embedded tools that are used to examine patterns, linkages, and relationships with the data. Users can view, manipulate, and analyze rich data sets from local to global scales, using interactive digital maps.

For each of the items, you will be asked to indicate the extent to which you agree or disagree with a statement. Your choices will always be one of the following five options:

- Strongly Agree
- Agree
- No Opinion
- Disagree
- Strongly Disagree

The survey contains 24 items. Please mark one response for each statement.

Section I: Ideas about learning. Items in this section present ideas related to learning and your experiences in school. Indicate the extent to which you agree or disagree with the following statements. Please mark ONE response for EACH item.

	Indicate how you feel about each statement.				
	Strongly Agree	**Agree**	**No Opinion**	**Disagree**	**Strongly Disagree**
1. I enjoy learning science.	◯	◯	◯	◯	◯
2. I enjoy using technology to investigate science-related problems.	◯	◯	◯	◯	◯
3. I plan to take more science-related classes in high school.	◯	◯	◯	◯	◯
4. Technology helps me learn science.	◯	◯	◯	◯	◯
5. More time in the school day should be devoted to science-related learning.	◯	◯	◯	◯	◯
6. Technology makes learning science more interesting.	◯	◯	◯	◯	◯
7. I enjoy using technology to learn science.	◯	◯	◯	◯	◯
8. More time in science classes should involve the use of technology.	◯	◯	◯	◯	◯

Section II: Ideas about careers. Items in this section present ideas related to careers in science and technology. Indicate the extent to which you agree or disagree with the following statements. Please mark ONE response for EACH item.

	Indicate how you feel about each statement.				
	Strongly Agree	**Agree**	**No Opinion**	**Disagree**	**Strongly Disagree**
9. I would be more likely to take a job if I knew it involved working with technology.	○	○	○	○	○
10. Having a job in a technology-related field would be interesting.	○	○	○	○	○
11. I would like to work in a science-related area.	○	○	○	○	○
12. I would like to get a job in a technology-related field.	○	○	○	○	○
13. I would like to work in a science-related field that uses technology.	○	○	○	○	○
14. I would like to work with people who solve science-related problems with technology.	○	○	○	○	○
15. I would enjoy a job that uses technology.	○	○	○	○	○
16. I will probably choose a job that involves using technology.	○	○	○	○	○
17. I would enjoy working in a science-related field.	○	○	○	○	○
18. I would like to work in a science laboratory or field setting.	○	○	○	○	○

Section III: Ideas about geospatial technology. Items in this section present ideas related to geospatial technology. Indicate the extent to which you agree or disagree with the following statements. Please mark ONE response for EACH item.

	Indicate how you feel about each statement.				
	Strongly Agree	**Agree**	**No Opinion**	**Disagree**	**Strongly Disagree**
19. Using geospatial technology (such as GIS) helps find solutions to problems in our world.	○	○	○	○	○
20. Geospatial technology is important for our society's development.	○	○	○	○	○
21. Using geospatial technology improves our ability to understand our community.	○	○	○	○	○
22. Geospatial technology is important for modern life.	○	○	○	○	○
23. Geospatial technology is useful for the problems of everyday life.	○	○	○	○	○
24. Using geospatial technology with gaming (such as Pokemon Go!) is useful for exploring my environment.	○	○	○	○	○

STEM-GEO Subscales

Subscales	Item #s
1. Interest in learning science and science-related careers	1, 3, 5, 11, 13, 14, 17, 18
2. Interest in using technology to learn science	2, 4, 6, 7, 8
3. Interest in careers in technology	9, 10, 12, 15, 16
4. Attitudes toward geospatial technology	19, 20, 21, 22, 23, 24