

• COMMUNITY PARTNER WITH SCHOOLS NATIONWIDE •

STEM FIELD TRIP Program

SCIENCE, TECHNOLOGY, ENGINEERING & MATH!

OUR THREE HOUR S.T.E.M. FIELD TRIP PROGRAM COMBINES S.T.E.M. EDUCATION, PHYSICAL EDUCATION AND LUNCH IN AN EXCITING FORMAT!

- **S.T.E.M. Education:** The first hour the students participate in one of our seven S.T.E.M. lessons which demonstrate the relationship between S.T.E.M. and roller skating. Students will learn S.T.E.M. concepts in an interactive and entertaining way, enhancing learning. The S.T.E.M. portion of this program is instructed by a trained, experienced educator who is very knowledgeable on S.T.E.M.'s relationship to roller skating. Some of the topics covered in the S.T.E.M. lessons are motion, force, friction, sound waves, Doppler Effect, light waves, design and geometry.
- **Lunch:** The students will be served lunch from our cafe after the S.T.E.M. lesson.
- **Roller Skating for Physical Education:** Students will skate for approximately two hours. This is an entertaining, and fun way to experience the S.T.E.M. concepts that they just learned. This skating event allows two hours of exercise and a student can burn up to 1,000 calories in just one field trip. For the beginner skaters, we provide them with skatemates. These are trainers that help them balance and skate, so they have a positive experience during their field trip.
- All lesson plans are copyrighted and meet Next Generation Science Standards.

• QUANTITATIVE SURVEY RESULTS OF 3,000 K-8 STUDENTS •

In the last school year, the Battelle Memorial Institute (Battelle)¹, the world's largest non-profit research and development organization with over 22,000 employees, located in Ohio funded 3,000 K-8 students to attend 35 S.T.E.M. programs at our two Columbus roller rinks. The students were surveyed before the S.T.E.M. presentation and students and teachers were both surveyed immediately after the S.T.E.M. presentation. **The results showed an EXTREMELY POSITIVE EXPERIENCE from students and teachers when attending the S.T.E.M. program. HERE ARE THE RESULTS:**

STUDENT DATA

PRE-FIELD STUDY²

I know what S.T.E.M. stands for.	778 / 2373 33% agree or strongly agree
Awareness of at least 1 S.T.E.M. career.	560 / 2373 24% agree or strongly agree
I already know about the science of roller-skating.	813 / 2373 34% agree or strongly agree
I already know a lot of examples of S.T.E.M. in my life.	556 / 2373 23% agree or strongly agree
In school, I learn a lot about Science, Technology, Engineering and Math.	1929 / 2373 81% agree or strongly agree
I have attended a S.T.E.M. related field trip before.	761 / 2373 32% agree or strongly agree

POST-FIELD STUDY³

I know what each of the letters of S.T.E.M. stands for.	2309 / 2445 94% agree or strongly agree
I had fun with S.T.E.M. today.	1936 / 2445 79% agree or strongly agree
I am more aware of S.T.E.M. related careers than I was before today's event.	2023 / 2445 83% agree or strongly agree
After today's event, I plan to talk about the science of skating with others.	1437 / 2445 59% agree or strongly agree
After today's event, I would like to learn more about S.T.E.M. and roller skating.	1702 / 2445 70% agree or strongly agree
After today's event, I want more chances to learn about S.T.E.M.	1645 / 2445 67% agree or strongly agree
I would be interested in attending another field trip like today's event.	2294 / 2445 94% agree or strongly agree
Overall, I enjoyed today's event.	2428 / 2445 99% agree or strongly agree

TEACHER DATA

POST-FIELD STUDY³

My students learned something new about S.T.E.M.	148/149 99% agree or strongly agree
My students were engaged during the entire S.T.E.M. activity.	133 / 149 89% agree or strongly agree
Roller skating was an effective way to teach S.T.E.M. to my students.	132 / 149 89% agree or strongly agree
My students gained an awareness of several S.T.E.M. related careers.	127 / 149 85% agree or strongly agree
Today's event helped me learn how I can link S.T.E.M. concepts from roller-skating into my instruction.	135 / 149 91% agree or strongly agree
It would be helpful to have lessons that I could teach at school that integrate S.T.E.M. and roller-skating w/in the context of what I already teach.	132 / 149 89% agree or strongly agree
Physical activity is an important factor that I consider when choosing field trips for my class.	138 / 149 93% agree or strongly agree
Hands-on activity for kids is an important factor that I consider when choosing a field trip for my class.	147 / 149 99% agree or strongly agree
I am likely to return here with my students for another S.T.E.M. related activity.	142 / 149 95% agree or strongly agree
I will encourage colleagues to attend a S.T.E.M. activity here.	145 / 149 97% agree or strongly agree
Overall, today's event was a valuable experience for my students.	148/149 99% agree or strongly agree

(1) Visit www.battelle.org to learn more about their commitment to sciences and S.T.E.M. education.

(2) The pre-field survey was the responsibility of the school to complete prior to the S.T.E.M. field trip and many were not completed.

(3) The post-field survey was given to every student immediately after the S.T.E.M. field trip and some were not complete.