

December 17, 2021: Science Focus

Science is a "big deal" around this school. The science, technology, and math instructors provide thoughtful and engaging lessons for the children from grades prekindergarten through grade eight, and it is evident that intellectual progress is the end-goal.





Science, in particular, is considered a specialty, and Topeka Collegiate has two specialists in this area providing instruction. Ms. Mary Kate Baldwin works with the students in the Lower School, and Mr. Kevin Simons has the Middle School. The science curriculum has been created and developed by the two of them, using many resources, which makes it unique to the school. Each class receives grade-level appropriate instruction but through a challenging and advanced curriculum.

A few specific lower school examples of scientific engagement can be pointed to as highlights of Topeka Collegiate's experience.

- Prekindergarten and first-grade students spend a great deal of science time in a unit devoted to space exploration and the principles within.
- The second graders participate in a program sponsored by a collaborative effort between The Topeka Zoo and the Kansas Museum of History. They help catch and tag the world's at-risk Monarch Butterfly population.
- Our fifth graders spent five days this semester participating in the Department of Defense StarBase program, whose goal is to motivate students to explore Science, Technology, Engineering, and Math. Collegiate students are motivated toward STEM activities even before attending this programming on Forbes Field. The highlight for





many students at StarBase was the touring of two impressive aircraft, a KC–135 Refueling Tanker and a Blackhawk Helicopter, while others enjoyed the Computer-Aided Design components of the program. These are just a few of the activities for this group.

Our strong science programming continues into Middle School. Students spend the first semester of each year in pursuit of their own scientific interests, both in and out of the science classroom. Determining their culminating project is just a small part of the process, and all criteria are published to students and parents at the outset. A complete plan must be completed in advance of any research efforts. Students determine their individual (or small group) hypothesis, set their plan in motion, do the necessary research, carry out the data collection, and synthesize and organize the entirety of their work.

All of this is finally prepared for display and judging at the annual Topeka Collegiate Science Fair. Each project is scored by a judge who spends time with the student, hearing about the research and outcomes of the project. Criteria are evaluated, and students receive feedback after the event.

One of the requirements for all middle school students is that at least one time in their middle school years they will follow up our local event by participating in a District Science Fair. This District Science Fair is a qualifier for any student wishing to advance their project to state- and national-level competitions. Topeka Collegiate students who attend the district competition generally fare well, with several advancing to the state level.

Congratulations to both Ms. Baldwin and Mr. Simons for their inspiring instruction and truly motivating science programming at Topeka Collegiate.

Would you like to suggest a curriculum highlight? Email Academic Dean, Mr. Flax, at mflax@topekacollegiate.org.



