

22 April: The Return of the Heart...Dissection, that is!

The first and second-grade science curriculum is on a two-year rotation, sharing common objectives each year. There are goals for each grade level each year, and the science curriculum is thorough and comprehensive. Ms. Mary Kate Baldwin, the Lower School science instructor, manages the general science curriculum. Some of the activities, however, are so dynamic that they are a standard for every year. The study of the circulatory system is one of those. So each year the classroom teachers, Ms. Frederick, Ms. Schwerdt, and Mrs. Dudinyak, teach that unit of study.







In staying close to our Beyond the Book philosophy, the study of the heart is not left to books and lectures. Each year the first-grade students experience, first-hand, heart dissection. Thanks to the generosity of Topeka Collegiate parent partners, first-grade students are afforded this opportunity annually. Graciously, we can have the second and third-grade classes join this year, as the pandemic did not allow for this activity when they were in first grade.

So, today, Dr. Patrick Birkbeck and Dr. Seshu Rao brought the program back to full strength, bringing in pig hearts to demonstrate the dissection. Pig hearts are used as they most closely resemble the human heart in structure, size, and function. Through this activity, students can observe the major chambers, valves, and vessels of the heart and can describe the circulation of blood through the heart to the lungs and back and out to the rest of the body. The afternoon was divided into three sessions so all students would have a chance to get up close and personal with the process.

Dr. Birkbeck and Dr. Rao led the students in a discussion about the human heart, how it works, and how to keep it healthy. Then the work began. And what an experience this was!



Student reactions were mixed, of course, but all thought that the dissection was great. There were comments of awe, shrieks of excitement, exclamations of disgust, etc. as all shared out loud what they thought about all of this. The fascination of the experience was evident on the faces of every student in the room.

As a follow-up to this, each first-grade student will write an essay about the dissection and what they learned during the heart unit. The lower school students benefit so very much from all of our hands-on and exploratory classwork at Topeka Collegiate. Mrs. Dudinyak, Ms. Frederick, and Ms. Schwerdt have done a tremendous job with this unit of study. And they have more exciting activities and events planned for these last few weeks of school. So many thanks to Dr. Birkbeck and Dr. Rao. Their generosity of time and talent reflects their continued commitment to the high standards of academic excellence at Topeka Collegiate.



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