



# INTERNATIONAL BACCALAUREATE

**Newsletter** 

Winter 2018

# APPLYING RESEARCH SKILLS TO ANSWER SCIENTIFIC QUESTIONS

Last September, Year 3 (Grade 8) science students chose a science question to explore in preparation for the Annual LCA Science Fair in late January. Students spent weeks researching all aspects of their topic in order to develop a hypothesis and experimental procedures. After



careful data collection and analysis, students presented their findings to judges from St. Edward High School, St. Ignatius High School, St. Joseph

Academy, Case Western Reserve and other educational institutions. Each student spent time answering questions about their scientific processes, results, and sources of error. The winning project was created by Conor McGuire, who compared electrolytes in Gatorade, orange juice, and a homemade sports drink. Congratulations to all participants!

From Mrs. McGuire, LCA IB Co-ordinator

Active learning continues to thrive in the classrooms and halls of LCA. Inherent in the learning experiences, and critical to MYP unit planning, is the development of what we call "Approaches to Learning". Continuous growth in ATL skills ensures that our students will be equipped to become lifelong learners. In this newsletter you will find evidence of lessons planned to promote critical thinking, creative thinking, communication, collaboration, media literacy, information literacy, reflection, and the integration and connection of knowledge. We know that a fulfilling life is one in which we remain open to growth and development. By explicitly planning learning experiences that promote the development of ATL skills, students gain the tools to make the most of their journey - within and beyond educational settings.

## PASSIONATE LEARNERS

Over the course of the first semester, 7th grade General Music students completed passion projects. They thoughtfully chose an area of music that interested them, then conducted extensive research in order to put together a final product that would both inform and engage their audience. Some topics included: how music affects emotions, misconceptions about dancers and the art of dance, how the difference in the male and female vocal chords result in different voices/octaves, why many British singers seemingly lose their accent when singing, how the score of a movie affects the way in which we view and interpret various scenes, how the piano evolved over time, and what the martial music of past wars might sound like today. Additionally, they each chose two Approaches to Learning (ATLs) in which they felt they had room to grow, and periodically referred back to those choices to evaluate their growth. On the final day of the first semester, they presented their projects to their classmates and several faculty members. Many of them went on to present to both current and prospective LCA families at Open House. All of the students who participated in the creation of these incredible passion projects exemplified being inquirers, risk-takers, reflective thinkers, and knowledgeable communicators!



## **FUTURE ENGINEERS**



Fifth grade students in Mrs. Friel's Extended Curriculum Class completed a civil engineering unit on bridges. Students grew in so many ways through their research, group work, and hands-on bridge building challenges. These excerpts from their personal reflections evidence the many ways they grew as IB learners.

Knowledgeable Inquirers: "I can't believe how much research it took so we could build an efficient bridge. I thought it was cool to read about the history and making of the Brooklyn Bridge. I learned a lot about how shape, design and material affect the strength of your bridge. All this research helped us find ways to design a stronger bridge." "Carter and Sean"

Open-Minded Communicators: "Whenever we work we talk about the best ways to do things, and we share with each other what we did. This way we all can put our ideas together to make a good final

product. We never try to exclude--we always try to include each other." ~Roger

Risk-Takers: "I really enjoyed this unit because it was fun and challenging at the same time. I got frustrated at one point because I forgot to check the width of our bridge, and it was too long. We ended up getting it together and won the contest. I learned that when you have a mishap, don't give up. Just try and find a way to improve." ~Greg

Reflective Thinkers: "I was probably most successful when we took our time testing. I realized that when we were just rushing through everything, including the testing and the building, we didn't succeed. We dumped in handfuls of pennies into the bucket at once and the bridge snapped almost right away. We realized how silly of a mistake it was and we tested our other bridges differently." ~Owen and Maggie

"My design didn't really work well because I didn't double-up on the pasta. Other teams did, and it was worth it. I think one of the other reasons I failed was because I didn't have a partner. I've again learned that two minds are better than one, and I could have really used some help. I think that is a considerable decision to make in the future." ~Nina

# INDIVIDUALS AND SOCIETIES IN GRADE FIVE AND SIX

In January, the fifth grade students capped off their study of the United States by taking a closer look at our economy. Using paper airplanes, the students simulated a market economic system, helping them to better understand important economic characteristics. The students developed a prototype plane that could be thrown through a frame in a limited time frame which mirrored the availability and use of resources. Afterward, they made choices about the roles each would play and completed the trial flying the planes. This mimicked production and product management. After the trial, students reflected on the roles and applied the ideas to the structure of a free market economy and compared those to a traditional and command economies.



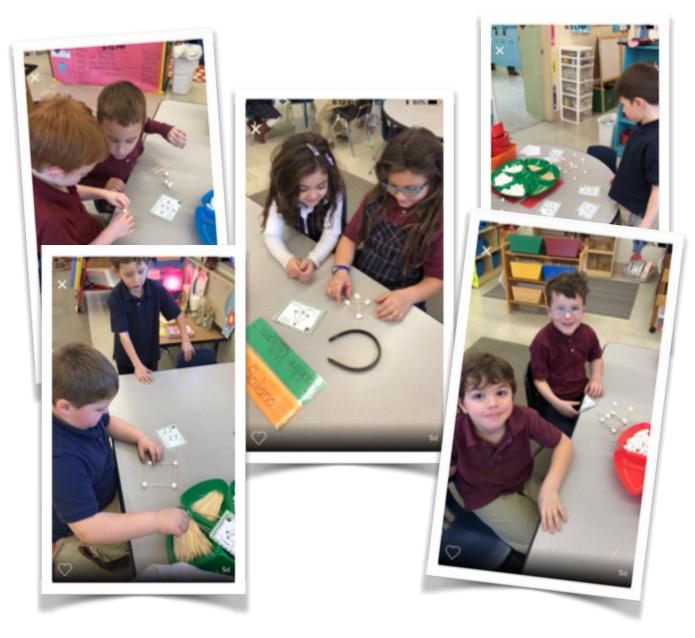
The sixth graders summarized their knowledge of life during the prehistoric times by creating written or recorded video diaries. Students centered their narratives on exciting but historically accurate events. Some accounts included participating in hunting or fishing expeditions and the creation of tools or other innovations such as fire, while others told of adapting to the



Ice Age or the need to move from place to place as nomads. The diaries told of everyday details and happenings such as the clothing worn, the shelters lived in, religious practices, and the food they ate. Students added doodles and drawing to further illustrate prehistoric culture. This project gave students an opportunity to reflect on how innovations and adaptation made by the earliest humans helped to shape and advance their culture.

# "SCI" FRIDAY IN KINDERGARTEN

Every Friday afternoon Mrs. Reali's students engage in "Sci-Friday", hands-on science challenges, or STEM activities. For their first challenge, they were asked to build 3D structures out of marshmallows and toothpicks. The kindergarteners use their inquiry skills and tapped into their prior knowledge of building and constructing to help them accomplish their goal. They also had to be open-minded and accepting of their partner's ideas as they worked together to build the various structures. Using task cards, they worked collaboratively with their peers and were able to produce many 3D structures. Many of the students had to learn how to problem solve when their structures started to fall over. Every student group, however, completed their first STEM challenge with great success!



# **Making Connections**

One of the goals of Language Acquisition is to develop students' ability to draw connections between what they learn in class and in their other content areas. French students had the opportunity to do just that in a December field trip to the Cleveland Museum of Art's Jazz Age exhibit. Students learned how fashion, art, and architecture in 1920s America were strongly influenced by the French. After visiting the museum's galleries and focusing on key pieces of art, students used their cell phones to take photographs of other works of art and worked in teams to explain how the items they photographed reflected the style of the Jazz Age Era.

"This is a painting of the Eiffel Tower at an aerial view. It uses different, vibrant colors and the same simple, geometric style, which was found easily in the Twenties."



"This is a couch that was in the home of Charles Doucet, a French designer. It reflects the African culture because France had a lot of colonies in Africa at that time."



"The tomb of King Tut was found in the 1920's. These candles sticks have an Egyptian design."



# **Catholic Schools Weeks**

Catholic Schools Week once again included activities to celebrate cultures and our identity as an International Baccalaureate World School. More than 40 students found and identified 50 flags hidden throughout the school. Junior High students participated in a cultural show and tell. Several students and teachers shared prayers throughout the day in other languages, including Arabic, French, Spanish, and Russian. Our primary students created crafts and learned dances originating in other countries. Finally, our middle years students were presented with an open-ended writing assignment in which they were asked to reflect upon the IB's aim "to develop inquiring, knowledgeable, and caring young people who help to create a better and more peaceful world through intercultural understanding and respect." Submissions included poems, stories, essays, and editorials. Here are two samples of our students' work.

## The Eyes of God

Why don't people see Through the eyes of God Where only the inside is seen. If somebody blew out the sun And we could not see anyone We could only hear speaking And all of our tongues, Speaking as one, Our languages read, spoken, celebrated, and And everyone held hands as one Wrapping around the world. Our cultures would be Together and free To fly high like lanterns in the sky. No questions, just pride Letting ourselves shine. And all this could be, No, it's not fantasy

If we just looked deeper And through the skin To what really matters.

So raise up your chin And smile big For the world to see For in the eyes of God Everyone's the same as you and me. Our differences may be seen and accepted. For nobody can really be perfected. And what if stereotypes will someday be dead Won't matter the color of the hair on your head. Or if you have any anyway. I hope all this will change someday. So why don't we look Through the eyes of God Where everyone is equal And no looks are odd.

> ~Maggie Grade 5

#### Formation of the United Nations

One of the most important moments for peace in our world was the formation of the United Nations. To fully understand the scope of the UN, we will have to go back to 1918, immediately after World War I. To try and ensure that the proclaimed 'War to End All Wars' would remain that way, sixty three countries around the globe joined together to form the League of Nations, an organization that was similar to the UN, with a goal to stop another world war. They were able to maintain their goal for about two decades, but when Japan attacked China in 1937, everything fell apart. Between 1937 until it ended in 1945, the League of Nations lost about fourteen countries and the power to make major world decisions. After eight years of decline, it was shut down and was replaced by the United Nations.

The UN started with 51 members around the globe and originally showed signs of being another League of nations, whose main goal would be to keep the Axis nations of Germany, Italy, and Japan from rising up and causing another world war. But this organization was different in many ways. One was the fact that the United States, the world's richest and most industrialized country, was a member. Another was that they knew the mistakes of the League of Nations and made sure not to repeat them. They have been successful in this, and today it is the largest organization that sends aid to other countries. It also helps find homes for refugees and it includes every country in the world aside from Vatican City, Palestine, Taiwan, Western Sahara, Kosovo, South Ossetia, Abkhazia and Northern Cyprus. It is based in New York, New York and promotes peace throughout the world through events and treaties such as the International Day of Peace.

The creation of the UN relates to the IB mission statement because it has kept the world largely at peace for seventy years. I attribute this mostly to the fact that instead of punishing defeated nations, they helped them rebuild, making it less likely for those nations to rise up in the future. This behavior can apply to everything, and all children should learn, instead of punishing an individual for bad behavior, to forgive them.

~James Grade 7







